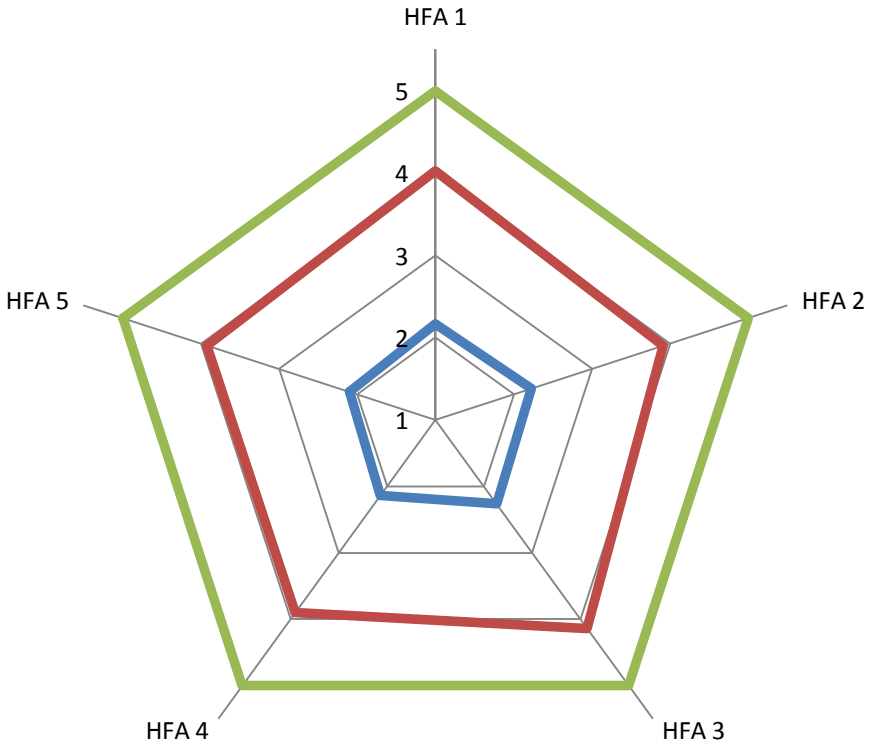
Armenia Disaster Risk Reduction System

Capacity Development Report



United Nations Development Program
Bureau of Crisis Prevention and Recovery
Capacity Development Group

Yerevan, February 2010

Table of Contents

Annexes:

1. MOES. Institutional Profile and Horizon scan
2. Stakeholder Analysis and Institution-grams
3. Vision Statement. DRR system in Armenia
4. Strategic Capacities for effective DRR system in Armenia
5. DRR Capacity Development tool
6. Overall Capacity Development tool results
7. Name of people/organizations participated in the capacity development process.
8. Collated feedback on process from participants
9. Summary of HFA
10. Summary of the capacity development process and milestones

Acknowledgements

The capacity development process for the Disaster Risk Reduction System of Armenia and the information contained in this report has been made possible by the significant contribution and commitment of the Ministry of Emergency Services (MoES) and the five supporting agencies. The Armenian UNDP country office and supporting project helped facilitate the process and enabled extensive national and local stakeholder engagement. The Disaster Management Team generously provided insights and guidance at key stages. Appreciation is expressed to all those who participated and provided their time and extensive knowledge, to make this a productive and meaningful process.

Executive Summary

In response to the interest expressed by the Government of Armenia, the Ministry of Emergency Situations (MoES) and UNDP Armenia engaged UNDP experts to work with MoES to design and facilitate a Capacity Development process for the national Disaster Risk Reduction (DRR) system in Armenia. In consultation with the Ministry, the Hyogo Framework for Action (HFA) 2005-2015 was selected as a basis for designing actionable indicators to measure the current baseline and identify the desired level of capacity for the DRR system.

Disaster Risk Reduction Capacity Development process in Armenia has been an innovative exercise for number of reasons: i) it adapted the UNDP Capacity Development Methodology for DRR; which was the first time in the region; ii) the assessment process established a measurable base line of DRR capacity in Armenia; and iii) it directly engaged 6 key DRR organizations and was verified with a wide range of DRR stakeholders, at a national and local level.

The capacity development process allowed a capacity assessment tool based on the HFA actions 1-5 and key activities to be developed to facilitate self-assessment, inform stakeholder consultations and broaden the understanding and application of HFA. Use of internationally accepted frameworks for DRR and capacity development has created an evidence based rationale for DRR in Armenia. The methodology and tools developed for the DRR system in Armenia are a valuable resource that can be adapted and replicated in Armenia and in other countries and situations. The DRR capacity development process in Armenia helped key government stakeholders actively participate to develop a shared vision for an effective DRR system. The general public was also kept informed of the DRR system exercise by media who actively covered milestone events of the process, as part of ongoing public awareness.

Based on the results of the DRR capacity development process, an Action Plan for capacity development has been recommended to strengthen the DRR system in Armenia. The Action Plan focuses on three capacity areas: 1) core organizational capacities; 2) technical capacities; and 3) community engagement and cooperation. The strategic actions include; i) devising a national strategy for DRR which includes a shift towards more effective engagement of communities and schools; ii) a new system wide monitoring and evaluation system to support coordination and information management contributing to an improvement in compliance; and iii) a National Disaster Observatory to unify databases for DRR institutions.

The DRR system baseline, findings, recommendations, and actions can be used for the following:

- The Ministry of Emergency Situations and other DRR stakeholders for planning and implementing institutional reforms to improve the performance, stability and adaptability of the DRR system;
- To provide a rationale for the allocation of resources for DRR at a national and local level;
- The report can be also used by local, national and international organizations to design and justify projects and programs for the DRR system;
- To inform reporting including to the National Security Council and on the HFA.

Context Setting

Purpose of the Capacity Development Process

In response to the interest expressed by the Government of Armenia, the Ministry of Emergency Situations (MoES) and UNDP Armenia engaged UNDP experts from the Capacity Development Group (CDG) and the Bureau for Crisis Prevention and Recovery (BCPR) to work with MoES to design and facilitate a Capacity Self Assessment of the national Disaster Risk Reduction (DRR) capacity in Armenia. In consultation with the Ministry, the Hyogo Framework for Action (HFA) 2005-2015 was selected as a basis for designing the indicators against which key government officials would measure the DRR system current and desired capacities. This report describes the process, findings and the suggested responses as well as a concrete plan for action with a short, medium and long term horizon.

The Ministry of Emergency Situations was identified as a "linchpin organization" due to its critical role as a coordinating agency in the effective response to and prevention of natural disasters. Although the effective functioning of the Ministry is critical, a coordinated effort by all stakeholders, national and international, will be required to strengthen capacities for Disaster Risk Reduction (DRR) at all levels of the system. Strengthening the capacities of local governments and communities, together with the awareness of the population, is stressed by the HFA to manage and reduce risk. The primary aim of this report is to provide a roadmap to the Ministry of Emergency Situations that describes the actions that it could take to implement institutional reform of the DRR system and to develop capacities to achieve agreed outcomes, guided by the priorities outlined in the Hyogo Framework for Action. Secondly this report can provide a rationale and guidance for the support provided by partners and stakeholders, to strengthening the capacity of Disaster Risk Reduction system in Armenia.

The methodology utilized for this report emphasizes ***self***-assessment as an important principle for ensuring ownership and sustainability of the results of the capacity assessment process. This was done through involving the Ministry of Emergency Situations and the 5 key agencies that are part of the Ministry[1] together with other relevant stakeholders in the donor and civil society communities (through meetings of the Disaster Management Team, DMT) in Armenia and asking them for feedback at various points in the process. The capacity assessment tool was designed in a quantitative and qualitative manner, which lead to a clear, objective result. An initial analysis of this result was presented to both the Ministry and the DMT and validated. Based on initial feedback from the MoES working group the current report enters into a more in depth analysis and describes the final outcome of this process.

Natural Disaster Risks and Hazards in Armenia

Armenia is at high risk of natural disasters, owing to high levels of exposure and vulnerability, as well as insufficient capacity to manage risks. Risks associated with geophysical hazards are significant, as Armenia lies in one of the most seismically active regions of the world. Earthquakes have affected large numbers of people and caused significant economic losses over the past 20 years. The most devastating seismic event was the 1988 Spitak earthquake in Armenia that killed 25,000 people, injured 15,000, left 517,000 people homeless, caused significant damage to several cities, and resulted in direct economic losses of $ 14.2 billion. The landslide hazard zone covers one-third of the country, primarily in foothill

[1] Armenian Rescue Services, State Hydrometeorology and Monitoring Service, Technical Inspection, National Seismic Protection Service and State Reserves.

and mountain areas. Nearly 470,000 people are exposed (around 15 % of the total population). Average annual damages caused by landslides amount to approximately $10 million.[2]

Meteorological disasters have become more frequent and intense in the last few decades. Floods, mudslides, and debris flows threaten half of the country's territory, mainly in medium-altitude mountainous areas, where they typically occur once every three to ten years. During 2004-2007, mudflows damaged some 200 settlements and 600 sites on main transportation routes. Average annual damage from mudflows in the past four years is $2.9 million. Drought occurs almost every year in one or more locales of Armenia. In 2000-01 a severe drought resulted in losses of around $143 million in Armenia (with 297,000 people affected). Hailstorms and strong winds cause significant damage to the agricultural sector, with average annual losses of $30-40 million and $3.6 million, respectively.[3]

Climate change is expected to amplify the frequency and intensity of meteorological hazards in Armenia. According to the available projections, by 2100 temperatures are expected to climb by 1.7°C, and precipitation is predicted to decrease by 10%. Boundaries of thermal belts in mountain areas are expected to move upwards by 150-900 m. The lengths of dry spells within years are projected to increase, precipitation to become more intense during wet periods, and the number of extremely moist and extremely dry years to rise. A shift in the beginning, peak and duration of hydrological drought and flood periods is expected, owing to greater share of rainfall and glacial melt and smaller proportion of snowmelt in river flow. Alternating drought and flood periods, together with shifting rainfall patterns, could expand mudflow zones in foothill areas.

The risk of technological disasters is also significant. There are around 26 hazardous chemical enterprises in Armenia that use amonium, chlorine, chloric acid, nitric acid, etc., and over 1,500 enterprises that are at risk of explosion or catching fire. The Metsamor nuclear power plant is located in a seismically active zone.

The poplation, economy, and environment of Armenia are highly vulnerable to natural hazards. Most significantly, according to the World Bank poverty incidence is around 30% and is concentrated in rural areas and provincial cities.[4] A high degree of urbanization (64%) concentrates disaster (particularly seismic) risks in cities. The economy remains highly vulnerable. In any given year, there is a 20% chance that a major disaster will result in losses of 12.7% of GDP.[5] During 1990-2005 Armenia lost close to 20% of its forest cover (around 63,000 hectares), which has greatly increased the likelihood of mudflows and landslides. There is an urgent need to increase resilience to natural hazards by integrating disaster risk reduction (DRR) into development and building capacities at all levels.

The Government of Armenia recognizes the threats to development posed by natural disasters and since 1991 has worked, often in concert with international organizations and conventions, to strengthen its DRR capacities. As a UN member country, Armenia became a signatory in 2005 to the Hyogo Framework for Action (HFA). HFA defines a proactive and preventive disaster risk reduction approach.

[2] Armenia Emergency Management Administration (www.ema.am); Government of Armenia, 2005, *National Report on Disaster Reduction for World Conference on Disaster Reduction (18-22 January 2005, Kobe, Japan).*
[3] World Bank, 2009, *Disaster Risk Management and Emergency Management in Armenia.*
[4] World Bank, 2007, *Armenia: Geographic Distribution of Poverty and Inequality.*
[5] UN ISDR, 2009, *Central Asia and Caucasus Disaster Risk Management Initiative (CAC DRMI): Risk Assessment for Central Asia and the Caucasus, Desk Review.*

The strategic goals of HFA are to integrate DRR into development policies and planning, develop and strengthen institutions, and incorporate risk reduction approaches into emergency preparedness, response, and recovery programs. In order to achieve these goals, HFA outlines five priority areas of action. These are as follows:

1. Ensure that DRR is a national priority with a strong institutional basis for implementation;
2. Identify, assess, and monitor disaster risks and enhance early warning;
3. Use knowledge, innovation, and education to build a culture of safety and resilience at all levels;
4. Reduce the underlying risk factors; and
5. Strengthen disaster preparedness for effective response at all levels.

The Government of Armenia is committed to achieving the strategic goals of the HFA and has been active in participating in its reporting and other processes. While this commitment has been positively assessed, the DRR system does not yet possess the capacity required to make it fully effective. This report focuses upon assessing these capacities and identifying a capacity response and immediate areas of action that will strengthen DRR in the country.

Roles and Responsibilities of DRR Institutions in Armenia

The institutional setup of the DRR system in Armenia represents an evolutionary process, which began with the independence of the country in 1991. Disaster management has its origin in the Civil Defense System of the former Soviet Union, there has been a transition in the way DRR is managed in Armenia. The government is committed to complete the institutional transformation from disaster management to DRR which will involve further organizational development and streamlining systems and procedures.

Overall responsibility for coordinating DRR lies with the Government of Armenia's Ministry of Emergency Situations. At the policy level, the Ministry of Emergency Situations (MoES) is supported by the National Security Council, which has an overall coordinating and facilitating role for the governance of the DRR system. The National Security Council (NSC) plays a critical role in the process of any reform related to the security sector under which DRR falls. As such, the NSC and the Ministry of Emergency Situations are the two key institutions for developing national strategies and policies that govern the DRR system in Armenia. They also play a critical role in advocating for DRR support to the Government of Armenia and the international donor community.

The Ministry of Emergency Situations was formed in the spring of 2008. Five separate agencies are working as sub-structures under the Ministry of Emergency Situations. These structures are the Armenian Rescue Service (state body), the National Technical Safety Center, ArmStateHydromet Service (both are state non-commercial organizations), the National Service for Seismic Protection and the National Reserves Agency (both are part of the MoES and do not have separate legal status). The different status and institutional setup reflects the genesis of these structures throughout recent decades. Each of these structures has its own sub-structures, different branches and organizations, mainly located in the regions of the country or involved in providing specific services (for example the fire brigades of the Armenian Rescue Service).

Besides the above mentioned institutions, other Ministries and State Agencies are also involved in provision of DRR services. Among the key agencies in the DRR system are the Ministries of

Agriculture, Territorial Administration (MTA), Health, Nature Protection, Urban Development, Energy and Natural Resources, Science and Education and the State Committee for Water Management of MTA.

Local communities and regional governments are equally important within the DRR system. These bodies are coordinated through the Ministry of Territorial Administration (MTA), which thus plays a key role in the system. It is worth mentioning here that before the creation of the MoES the MTA was the lead state organization for coordinating emergency and DRR management.

Besides state organizations, there are a number of local NGOs which are involved in DRR activities. Their work covers various locales and is mostly focused on strengthening DRR capacities at community level.

Several donor and international partners support development of DRR system in Armenia. Among major partners are the World Bank, JICA, UNDP, Swiss Agency for Development and Cooperation (SDC), GTZ, WFP, OSCE, Red Cross and others. Many of the international partners support individual projects aimed at various elements of the DRR system in Armenia, for example, strengthening of institutional capacity, awareness raising, technical training, provision of equipment, community level projects etc. etc. Through the comprehensive capacity assessment based on the HFA, these support activities can now be better targeted at and coordinated towards the assessed priorities.

The existence of different institutions and organizations assumes a complex system of relationship between those institutions. In order to understand the role and relationships of key DRR institutions, a stakeholder and "institution-gram" analysis was conducted for five agencies working under the Ministry of Emergency Situations. The results of these analyses are presented in the *Annex 2* of this report. As per the suggestion of the Minister of MoES, a similar analysis for the Ministry was not conducted, since it is still in the process of formation. Most of the government stakeholders felt that the rationale for support to DRR needed to be stronger to allow advocacy for sufficient resources with both the international partners and the government of Armenia.

Capacity Assessment Process and Methodology

Capacity Development Process for the Disaster Risk Reduction System in Armenia

Capacity is indispensable for increased development effectiveness and the achievement of nationally and internationally agreed development targets, including crisis prevention and recovery. While financial resources are vital, they are not enough to bring about lasting improvements in people's lives. Supportive laws, policies and procedures, well-functioning organizations, and educated and skilled people create the foundation from which countries can promote sustainable human development. Capacity development helps to strengthen this foundation.

UNDP defines capacity development as "the process through which individuals, organizations, and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time". It is the "how" of making development work better, which is positioned front and centre in UNDP's work, as articulated in its Strategic Plan 2008 – 2013.

Supporting capacity development effectively requires identifying key capacities that already exist and additional capacities that may be needed. A capacity assessment offers a structured way to measure baseline capacities, compare capacity assets and needs, and generate insight for the formulation of a capacity development response that addresses those capacities that could be strengthened and optimizes those that are already strong and well placed.

UNDP has developed a systematic and rigorous, yet flexible and adaptable methodology to support capacity development. The UNDP Approach to Supporting Capacity Development includes:

a) Capacity Assessment Methodology

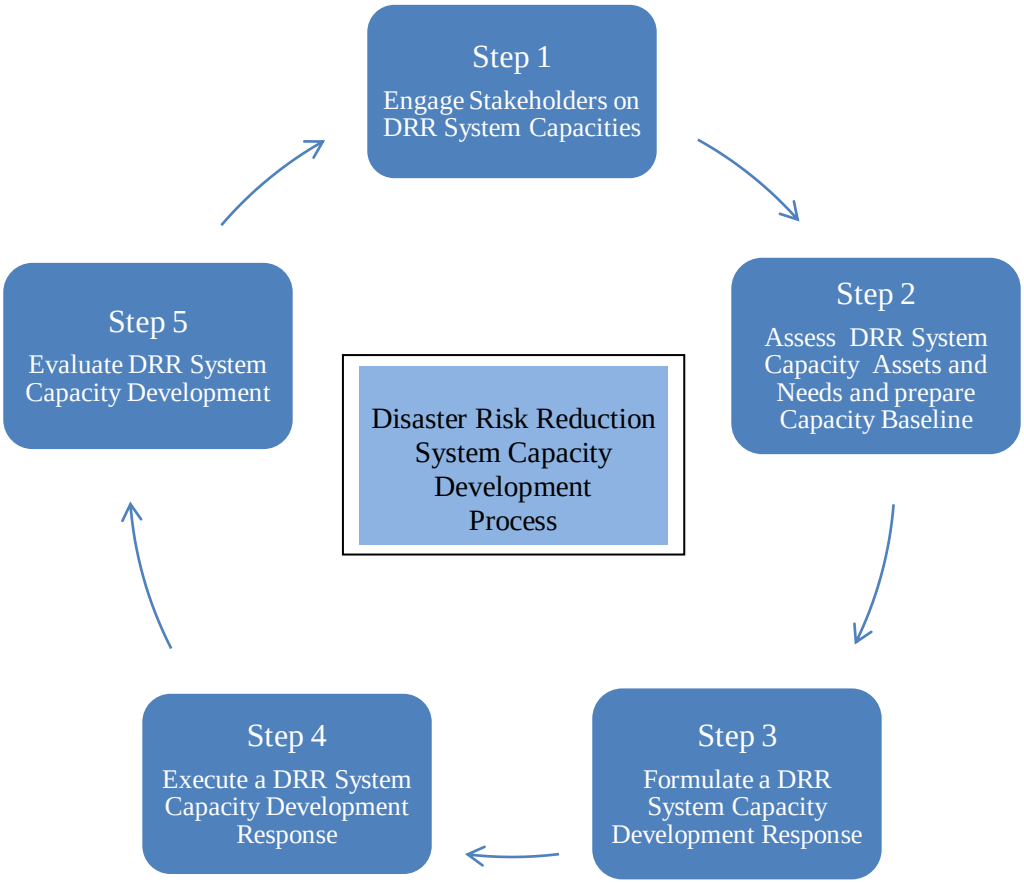
b) Capacity Development Responses

c) Capacity Development Measurement Framework

The figure below illustrates the UNDP capacity development process[6] and the key role of capacity assessment and measurement adapted to the DRR system in Armenia. Steps 1-3 were conducted in Armenia during December 2009 and January / February 2010, facilitated by a joint team from BCPR, RBEC and BDP in close collaboration with the Ministry of Emergency Situations.

[6] Further information including capacity development practice notes, guidelines and tools can be found on the UNDP Capacity Development Group site www.capacity.undp.org.

Figure 1. Five Step Process for developing Disaster Risk Reduction Capacities



Step 1 - Engaging DRR system stakeholders

The first mission in December 2009 presented the capacity development process to MoES and the five supporting agencies to provide sufficient background so that the scope of the process could be discussed. Following interviews with the individual organizations the scope of the capacity development process was identified so as 1) to focus on the DRR system in general; 2) to utilize the Hyogo Framework for Action (HFA) to identify the desired level of capacity and determine the criteria for measuring the capacity baseline; 3) to ensure that the capacity development process addressed DRR strategy, coordination and monitoring; 4) to conduct a self assessment with the MoES and the five agencies; and 5) to triangulate the results with other national and local stakeholders.

As the MoES, which is responsible for overseeing DRR, was recently established and the transformation of the structural framework was still underway, it was agreed to conduct a series of stakeholder analyses for each of the agencies (see Annex 2: Stakeholder Analysis). The stakeholder analysis was completed by early January 2010 by the five agencies. For each agency it identified the following: its role in the DRR system; key stakeholders; the importance and influence of stakeholders; the relationship with the stakeholders; and the strengths and issues it faced. The stakeholder analysis was conducted with the active participation of representatives of the five DRR agencies. During group meetings and individual discussions held with representatives of these agencies current and desired level of relationship between

different players and stakeholders were discussed. Participants of the stakeholder analysis process also presented issues and solutions for streamlining DRR operations in the country, avoiding existing duplications of functions and increasing overall efficiency for each organization and for the whole system. Results of the stakeholder analysis were presented and discussed with the Minister of MoES.

As a small country with a relatively high disaster risk, international and regional partners were also identified as key DRR stakeholders. Engagement is already facilitated through existing structures including the Disaster Management Team (DMT), which was utilized to inform development partners of the capacity development process.

In preparation for Step 2 of the capacity development process, a number of related self diagnostic tools were applied in January with MoES and the five agencies (see Annex1: Profile/ Horizon and Performance). These included identifying existing strategic goals and operational objectives; a horizon scan to identify the current legislative and policy context in which the capacities need to be developed; and considering institutional performance, stability and adaptability with outcomes and indicators. These were designed to introduce a results-based focus to the capacity development process. The institutional performance, stability and adaptability tool would have had a greater impact if facilitated in Step 3 of the capacity development process to develop some outcome indicators for the capacity development response.

Step 2 - Assess the DRR System Capacity Assets and Needs

The Capacity Assessment was conducted to assess the current level of capacity (or capacity assets) and the desired level for the DRR system in Armenia. It was primarily carried out using a self assessment tool to gather data and information on the DRR system. The objective of the capacity assessment tool is to identify the current capacity assets, which forms a capacity baseline. This allows the desired level of capacity to be determined and areas for capacity enhancement and priority needs to be identified. The timing of the assessment is important. In Armenia, it was conducted at a formative stage in the DRR system following the establishment of MoES and a critical time for the development of a strategic direction for DRR. The capacity assessment is not an end in itself and serves to provide inputs for formulating and executing the capacity response. The capacity baseline can then be used to evaluate the impact (Steps 3-5).

The capacity assessment process comprised of three main phases: 1) the design of a capacity assessment tool adapted for the DRR system and the Armenian context, that is owned and understood by MoES and the five agencies; 2) conducting the assessment; and 3) interpreting the results by comparing the existing capacities against the realistic level of desired capacities to determine gaps and priorities to inform the formulation of the capacity development response.

Different options were explored when designing the assessment. One option was to develop a specific series of technical and functional capacities tailored for MoES and each of the five agencies. This option was not selected as it would have been time consuming to develop and administer, although it is a potentially valuable follow-up action. The option that was chosen was to develop a capacity assessment tool for the DRR system as a whole based on the HFA actions 1-5 (see *Annex 5* DRR System Capacity Assessment Tool). This tool simply identified capacities for each activity for HFA Priority Actions 1-5.

For each capacity a set of indicators was developed ranging on a scale from 1 (representing no capacity) to 5 (representing full compliance with HFA).

An illustration of the capacity assessment tool for the first activity of HFA Action 1 is provided below (see Table 1 below). This was used to introduce the tool to participants who were to complete it, to give an example of an HFA action and key activity, together with a set of indicators numbered 1-5. It also provides an example of how the participants were to complete the assessment. Firstly by identifying the existing level of capacity with a X; secondly by indicating the desired level of capacity by selecting the relevant number (1-5) representing the criteria that most accurately represents the desired level and recording the number in the last column and; lastly, the participants were asked to indicate the importance of the capacity in the final column using High, Medium or Low. For full instructions on completing the tool please see (*Annex 5* DRR System Capacity Assessment Tool). When introducing the capacity tool to the participants an important decision was made for desired capacity to be defined as what could be realistically achieved by 2015, which corresponded to the HFA time frame. This has the effect that the desired level of capacity might not always be the highest (5), the level will need to take into account priorities, how reforms are sequenced, time lines and the resources available.

Table 1: Example of the First Activity of HFA Action 1 from the DRR Capacity Assessment Tool

HFA Action 1. Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation						
Capacity Indicators	**Baseline: Level of Existing Capacity**					**Target: Level of Desired Capacity. Importance of Capacity.**
	1	2	3	4	5	
HFA 1 Key activity (i) National institutional and legislative frameworks						
To what extent is there an legislative and regulatory framework in place for the DRR system?	No legislative and regulatory framework in place	Out dated and incomplete legislative and regulatory framework in place X	Review of the legislative and regulatory framework conducted and a prioritized plan to revise is approved	50% legislative and regulatory framework is revised and approved with 100% compliance	100% legislative and regulatory framework is revised and approved with 100% compliance	4 H

In addition to the capacity assessment tool an appropriate combination of desk research, workshops, working groups, interviews and field trips were conducted so that information and data could be gathered, triangulated, and validated. During the scoping mission it was identified that there was a vision of the future of the DRR system, but this was not commonly shared across all of the agencies. To obtain greater consistency on the responses of the desired capacities a strategic visioning workshop was held with MoES and the five agencies at the start of the second mission. This provided an opportunity for all of the participants from MoES and the five agencies to identify a common vision for the DRR system in

Armenia and for this to provide a strategic framework for completing the capacity assessment tool (see Annex 3: Draft Vision of DRR System).

The scoping mission, together with outputs from stakeholder analysis, horizon scan and strategic visioning, emphasized that functional capacities, such as strategic planning, coordination, integrated operations, and M&E, were high priorities. Although these are included in the HFA, a follow up to the Strategic Visioning exercise was conducted with the MoES and the five agencies to identify strategic capacities that would need to be addressed in the capacity response (see Annex 4: Strategic Capacities for the DRR System in Armenia).

The DRR system capacity assessment tool was completed by managers from MoES and the five Agencies. The data was then collated into a spread sheet and aggregated to allow corresponding charts to be prepared for the activities in each of the five HFA Priority Areas and an overview prepared (see Annex 6: HFA Capacity Assessment Collated Response). The Gap Analysis (see Annex 7: DRR HFA Capacity Gap) of the data included the following: what is going well (the lowest capacity gaps); what requires the most progress to reach the desired level of capacity (the highest capacity gaps); identifying potential priorities by multiplying the ten highest values of capacity gap times their assigned importance and; what are considered to be the three most important capacities (an example is provided in Table 2 below).

Table 2: Gap Analysis: What are considered to be the 3 most important capacities?

HFA	Description in English	Average Importance
1.a.	To what extent is there an legislative and regulatory framework in place for the DRR system	2.93
3.i.	To what extent are local risk reduction and disaster preparedness programs promoted and implemented in schools and higher education?	2.92
5.b.	To what extent are there technical and organizational capacities to manage disasters at regional (Caucasus), national and local levels?	2.91

Step 3 - Formulate DRR System Capacity Development Response

Starting with the findings of the assessment and other diagnostic tools, the first draft of capacity development response for the DRR system was formulated. This was a summary of the current capacity with a priority set of interventions for the key activities of HFA 1-5 that addresses those capacities that should be strengthened. It also included enhancements that could be made to optimize existing capacities that are already strong. This was presented to MoES and the five agencies, with opportunities provided to comment and give feedback on the interpretation of the results and the proposed responses.

The existing capacity indicators identified and measured in the assessment form a baseline for the capacity response. The criteria for the desired capacity indicator will help identify actions that can be

taken as part of the response and allow progress to be measured in step 5 - evaluating capacity development. Through the finalization of this report a prioritized and sequenced set of capacity responses will be presented to the Government of Armenia. Following consideration, feedback and any revisions, a costing of the DRR System capacity development can be prepared that should be realistic and utilize both funds available within government budgets and development partner programs, as well as considering Public Private Partnerships. The costing will help further prioritization, which will need further stakeholder engagement and use of findings of the capacity development process.

Findings and Responses

Strategic Capacity Visioning Workshop

The DRR system in Armenia is in a process of transformation. The creation of the Ministry of Emergency Situations was an important step in the process of streamlining DRR governance and management functions. Since its establishment, the MoES has initiated a review and reform process, with the purpose to develop effective and modern DRR and Emergency Management system in the country.

In this process, it is critically important to have a shared vision and understanding of the future direction among the key players and stakeholders. During the second DRR capacity assessment mission a Strategic Capacity Visioning workshop was conducted for the MoES and five agencies. Leaders and key officials of all six organizations took part in the brainstorming sessions, which helped to draft a vision for future DRR system of Armenia and important, "strategic" capacities which are necessary for such system.

According to the stakeholders Armenia should have *"… an effective, efficient, sustainable and self-developing Disaster Risk Reduction (DRR) system… which is able to systematically address existing and emerging disaster risks in the country, maintaining inclusive and coordinated mechanisms for risk identification, assessment and early warning, implementing risk reduction measures and increasing preparedness for effective response and recovery.*

At the heart of the DRR system in Armenia is the National DRR Platform, which provides clear vision, strategies and role for all DRR agencies and stakeholders, under overall leadership and coordination of the Ministry of Emergency Situations of Armenia. Implementation of the National DRR Platform is in line with international and regional strategies, such as Hyogo Framework for Action and other international conventions; it is supported by effective legislation, which creates enabling environment for DRR activities at all levels".

The full text of the draft vision statement and twenty strategic capacities are presented in the Annexes 3 and 4.

Finding and Responses of the Capacity Assessment

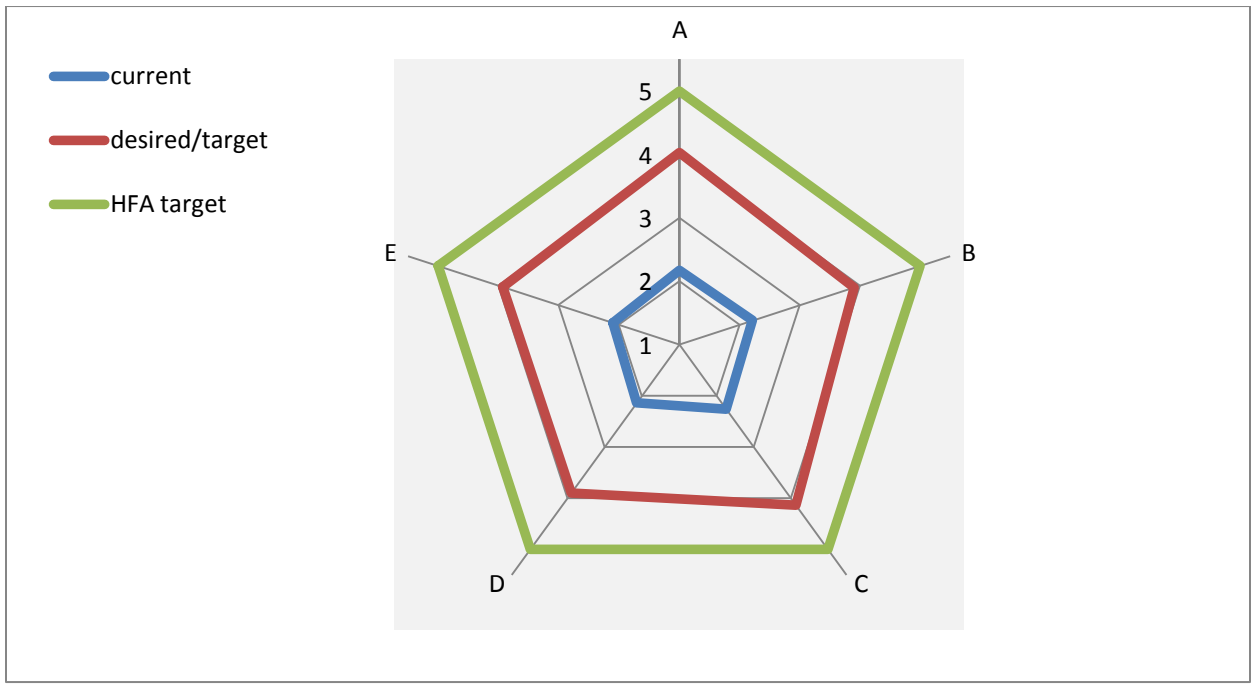
On completion of the DRR system capacity assessment tool, other diagnostic tools, interviews with key stakeholders and field visits, the findings were collated and analyzed for the HFA Priority Areas for Action 1-5. During this process potential capacity development responses were developed. The initial

findings were presented to MoES and the five agencies and feedback obtained through a working group. This allowed the following findings to be prepared together with potential responses.

DRR Armenia Capacity at Glance

Figure 2 presents the overall picture of DRR capacities in Armenia as provided by the analysis. Current capacities are compared versus desired/target level in the overall framework of HFA capacity standards. The average of current capacities within the five areas has a very tight distribution (2.10-2.26), with HFA Action Areas 3 and 1 being the highest and HFA Action Area 4 being the lowest. Desired capacities are also closely grouped (with averages ranging from 3.90 4.14 (HFA Action Area 3) to 3.90 (HFA Action Area 4). When desired capacities are factored with importance, a wider spread becomes apparent, with HFA Action Areas 3 and 1 again at the top of the ranking, closely followed by HFA Action Area 5, and more distantly followed by HFA Action Areas 4 and 2. In the ensuing sections of this report, each capacity area is discussed in more details, with finding and potential responses discussed during the assessment process.

Figure 2. Overall Assessment of DRR System Capacities in Armenia



Key: HFA Priority Areas for Action

A. Governance: organizational, legal and policy frameworks;
B. Risk identification, assessment, monitoring and early warning;
C. Knowledge management and education;
D. Reducing underlying risk factors;
E. Preparedness for effective response and recovery

HFA Action 1: Ensure that Disaster Risk Reduction is a National and Local Priority with a Strong Institutional Basis for Implementation

Current and Desired Capacities

Results from the horizon scan, desk research and the assessment tool confirmed that the main body of the DRR legislative framework is in place, including regulations intended to ensure compliance. However, the legislative framework, which was rated as the most important capacity (with a score of 2.93 out of a maximum of 3), does not reflect the current institutional structure, and procedures are not completely specified. This results in unclear mandates and competencies, as well as duplication among various actors in the system. Interviews verified that there needs to be an effective common system for monitoring DRR. This and other factors noted above leads to low levels of compliance.

Ad-hoc DRR strategies and limited integration, together with incomplete organizational reforms, make coordination difficult. Among the top ten priorities identified during the gap analysis of the capacity assessment tool were 1) the need for an integrated institutional framework for engagement, consensus building, and coordination for DRR and 2) integration of DRR issues into national policies, strategies and plans. In line with the HFA, MoES indicated its intention of establishing a National Platform as a priority to improve coordination across sectors

Insufficient allocation of financial resources for DRR was reported at national and local levels and within related sectors. It was recognized that in part this was due to fiscal constraints faced by the government budget, as well as the need for stronger capacities in advocating for resources supported by clear rationale.

Although there is a high technical base of staff working in DRR, concern was expressed regarding attracting, retaining, and motivating the level of staff required in DRR. The Crisis Management Academy is a relatively unique capacity asset that could play a greater role in the professional development of DRR staff.

Respondents noted that the institutional framework is outdated and not conducive to the de-concentration of the authority, responsibilities, and resources for DRR. There are limited and inconsistent policies and networks to engage and involve communities effectively in DRR, although there are some good pilot efforts that can be replicated.

In the DRR capacity assessment tool, strategies for the management of volunteers to participate in DRR were identified as the third largest capacity gap. However, this was also seen as the least important capacity. Although the gap was verified by the observations from local government, schools and communities, they placed a high importance on the effective management of volunteers. Different historical interpretations were given for the contrasting views on the use of volunteers.

Proposed Responses

Strengthening capacities related to HFA Priority Area of Action 1 is needed to lay the foundation for and facilitate the development of all other areas of capacity in the DRR system. These actions can be implemented over the short term, although the consolidation, streamlining, and strengthening of institutions and uptake by the relevant actors is necessarily a medium to long term endeavor. The following responses are proposed to improve the enabling environment and institutional framework:

- **Specify current mandates, revise regulations, and develop procedures** to clarify roles, responsibilities, and rights, streamline the system, and help improve compliance levels. Establish a **common system for DRR monitoring and evaluation** with actionable indicators, overseen by MoES and reporting to the National Security Council. Improvement of compliance also can be addressed by a range of responses, including strengthening awareness, education, information management, incentives and enforcement.
- **Prepare and finalize a national DRR strategy**, with MoES leading the process, by engaging key stakeholders and developing clear strategic goals. The implementation of the DRR strategy will require further consolidation of agency structures aligned to the strategic goals, which will then facilitate integrated and aligned work plans.
- **Establish a National Platform**, based on relevant best practice, which can facilitate coordination across sectors, and promote dialogue at a national and regional level to improve awareness of DRR. This will facilitate the integration of DRR into national policies, planning and programs in various development sectors, as well as into international or bilateral development aid policies and programs. Consideration will need to be made of the additional resources needed to provide secretariat support to the National Platform.

There is a need to **strengthen the rationale and advocacy for allocation of financial resources** at a national and local level based on clearly actionable DRR results, aligned to strategic goals. MoES should use greater awareness and advocacy to influence the allocation of resources in relevant sectors to implement DRR policies and programs. During the preparation of the DRR strategy and consolidation of agency structures, business models should be reviewed to determine whether or not some services can be sold commercially or delivered on a cost recovery basis.

Human resource management needs to become more results-focused, supported by a **strengthened performance management system**. Non-financial incentives such as ongoing staff development and offering of professional qualifications linked to results will help to attract and retain staff with the correct skills mix. There is also a need to provide accreditation for in service training through the Crisis Management Academy to develop a culture of lifetime learning.

De-concentration of DRR can be achieved through a range of measures. First, **DRR at a local and community level should be mainstreamed into planned changes to the enabling environment and institutional framework**. This will include appropriate authority, responsibilities and resources for DRR so it can be adequately addressed through local government development plans. Moreover, consistent policies and networks should be developed to **promote the engagement and involvement of communities effectively in DRR**, building upon the lessons learned from existing pilots in local level risk management which can be readily replicated. Finally, there should be an **informed debate on the use of volunteers**, taking into account other relevant models, and develop and implement a relevant volunteer management strategy, aligned to the national DRR strategy.

HFA Action 2: Identify, Assess, and Monitor Disaster Risks and Enhance Early Warning

Current and Desired Capacities

Risk assessment and early warning (HFA 2) rank second in overall current capacities among HFA areas and third among HFA areas when the importance assigned to these capacities is factored into the

analysis. When desired capacities are factored with importance, it ranks lowest of all HFA action areas. However, according to the horizon scan of MES, this area is prominent among strategic goals (study of phenomena that trigger emergency events) and operational goals, which is not surprising, given that risk assessment and early warning are the primary mandates of two of the MES's subdivisions (seismic survey and hydrometeorology).[7]

The most significant capacity gaps are in early warning (in terms of current capacities, as well as measurement against the importance assigned to them). The capacity assessment results make it obvious that the early warning system does not provide timely and understandable warning to end users or operational guidance to disaster managers. Coordination with relevant sectors and actors was rated as either non-existent or ad hoc by most respondents, and early warning systems appear to be only sporadically integrated into policy and decision making processes and emergency systems.

Gaps in capacity gaps are less with regard to information management for both early warning and risk assessment than for other areas. Current capacity for most parameters in the assessment tool related to information systems and exchange (i.e. recording, management, analysis, dissemination) was rated as close to or within the initial design and establishment phase.

Respondents noted that the utilization of scientific, technological, and technical capacity for risk assessment is mostly ad hoc, but that measures to improve them have been identified. Similarly, the development of indicators to assess disaster impacts upon society, economy, and environment was rated mostly as ad hoc. This probably indicates insufficient capacities in the vulnerability side of risk assessment (traditionally the system has focused mainly upon hazard analysis). Risk mapping and dissemination of risk maps appears to be uneven throughout the system. Moreover, scores indicate that the present system for the most part does not attempt to predict changes in risk patterns and account for emerging issues. This is particularly relevant to meteorological hazards, as climate change is expectedly to heighten risks associated with them.

Regional risk assessment and early warning capacities were rated low. However, desired capacities and importance assigned were also low. Thus the gaps do not appear to be as significant in this regard as for other areas analyzed above.

Proposed Responses

In order to make early warning systems effective, there is a need to integrate its various components (risk knowledge, monitoring and warning, dissemination and communication, response capabilities) into an end-to-end system. In this regard, there is a need to **facilitate the ongoing establishment of a Crisis Management Center**, which would continuously collect and analyze data from relevant agencies, coordinate and/or disseminate early warnings, and serve as a communications hub in deployment for response provision of headquarters with operational information.

[7] These include the following: organization and coordination of state expert examination of entities, objects, processes, engineering designs and solutions that might trigger emergency events, forecasts of earthquakes, approval of seismic zoning maps, confirmation of seismic risk expert evaluations, state policy and strategy in the field of hydrometeorology, and regular and ad-hoc hydro-meteorological observations, studies and forecasts.

Other actions are needed to improve individual components of the end-to-end system. These include strengthening risk assessments to establish thresholds for early warning and identify actions to be taken, **improvement of monitoring and forecasting** systems, and strengthening preparedness and response capacities in high-risk locales. For purposes of disseminating early warnings, it is recommended to utilize existing systems and integrate into those under development, including **e-governance & electronic school network systems.** A public/private partnership to disseminate alerts and warnings via **cellular telephone networks** would also be effective, given the high percentage of the population that uses them.

There is a need to adopt common approaches, standards, and methodologies for risk assessment. The following actions are recommended:

- Over the short term, develop a **National Disaster Observatory** that unifies the disparate databases of various agencies. Over the medium to long term develop and apply at both national and sub-national levels common and compatible standards for database structure, temporal and geographical referencing, cataloguing, archiving, and updating. Introduce procedures and regulations ensuring open access to databases to all relevant stakeholders at all levels.

- Over the short term, identify **common methodologies and procedures for risk analysis, as well as calibration and validation of assessments**. Over the medium term, develop the National Disaster Observatory to serve as a mechanism for their application.

- Over the short term, **provide training in vulnerability and capacity assessment, as well as cost-benefit analysis** for potential DRR interventions.

- Strongly linked to this intervention, improve **the analysis of climate change impacts** upon society, economic sectors, and the environment, in order to account for changing risk patterns and facilitate the identification of risk management measures. This should be done initially with a fairly short temporal focus (10-20 years), as many projected climate change impacts are amplifications of present-day phenomena and trends (such as aridization, desertification, increased variability or precipitation and river flows, etc.).

- For risk mapping, over the short term develop and begin to apply within MES a **common software platform and standards for GIS and mapping**. Over the medium to long term, in collaboration with other government entities contribute to advocating, developing, and facilitating the adoption of national GIS standards.

At the regional level, there is an opportunity to **expand data sharing and explore the possibilities for joint risk assessment of regional phenomena**, both geophysical and meteorological. The chief emerging risk, and one for which regional support may be forthcoming, is climate change

HFA Action 3: Use Knowledge, Innovation and Education to Build a Culture of Safety and Resilience at All Levels

Current and Desired Capacities

Respondents to the capacity assessment tool noted ad-hoc dissemination of information on disaster risks and reduction to sectors, regions and the population. There are specialist sources of information in the

five key agencies, and links with other sectors tend to be created for specific projects. The Public Information Center broadcasts a regular Emergency Channel. Although the use of information and communications was assessed as having a small capacity gap, there is a need for improved information management systems and a clear mechanism for coordinating the provision of relevant information local areas and sectors, in particular in high-risk areas.

The capacity of institutions dealing with urban development to provide information on disaster reduction options prior to constructions, land purchase and land sale showed the second largest capacity gap (of 2.46) and is potentially the seventh highest overall priority. This was also verified by the stakeholder analysis.

In the area of education and training, promoting and implementing programs and activities for learning how to minimize the effect of hazards in schools emerge as the potentially the second highest priority. DRR materials are included as a small part of the civil defense curriculum, and DRR pilot projects have produced specific materials that are available to some teachers. Despite training being delivered to some teachers, this is insufficient to allow broad dissemination of materials and integration of DRR into schools.

No countrywide community-based training program for DRR exists, but approximately 600 local representatives are trained annually by the Crisis Management State Academy, which has also supported Training of Trainers (ToT) pilots. Equal access and opportunities for DRR training and education for women and vulnerable constituencies was rated the fourth biggest capacity gap, as well as the eighth highest possible priority.

Technical and scientific capacities to develop and apply methodologies, studies and models to assess vulnerabilities to and impact of geographical, weather, water and climate related hazards was considered the fourth smallest capacity gap. It was recognized that there was limited use of methods for predictive multi-risk assessments and socioeconomic cost benefit analysis of risk reduction for incorporation into decision making processes.

The assessment highlighted a wide spread of views on media engagement in order to stimulate a culture of disaster resilience and strong community involvement. There has been an investment into the Public Information Centre (PIC), but there is not a broad DRR public awareness strategy which would include a media strategy to support public engagement and consultations.

Proposed Responses

To enhance information management and exchange, MoES should coordinate the development of an **improved information management system** that provides understandable and relevant information to priority sectors as well as local areas and population in high-risk areas. A key component of such a system would be the National Disaster Observatory recommended above. The proposed information management system would support a network of disaster professionals that improves dialogue and cooperation and makes appropriate expertise available for local risk reduction plans. One immediate priority for this is in urban development, in particular relating to seismic risks.

For education and training, the MoES and Ministry of Education need to develop and implement an **integrated strategy for enhancing and updating the DRR content of the curriculum.** This will

include fast tracking the DRR training of teachers at the same time widely disseminating existing DRR-specific materials.

To enhance local capacities to mitigate and cope with disasters, there is a need to design and execute a **needs-based local level capacity development program** (this would be developed alongside the volunteer strategy). This would draw upon lessons learnt and approaches from existing programs, maximize the resources available by targeting priority groups and vulnerable areas, and utilize other initiatives such as e-governance and scale up to achieve target numbers through ToT.

Responses in the area of research should be **integrated with the efforts to develop capacities in risk assessment and cost-benefit analysis** (recommended above under HFA Action 2).

A key element of the new national DRR strategy will be a **public awareness strategy**. The public awareness strategy, based on the main issues and target audiences, will consider how to integrate DRR public awareness into key sectors, identify the appropriate role(s) for the media, effectively use technology and ICT, and determine how to utilize Armenian traditions and culture in campaigns and consultations. This can be informed by existing pilot projects, the work of the Public Information Centre and looking at public awareness strategies in other sectors.

HFA Action 4: Reducing the Underlying Risk Factors

Current and Desired Capacities

HFA Action 4 (reducing the underlying risk factors) ranks last in overall current capacities among HFA areas, as well as next to lowest in terms of both current capacity and desired capacity factored with importance. The low importance assigned to this area is not surprising, given that the horizon scan of MES indicates a strong civil defense/rapid response orientation and refers to HFA 4 only with regard to seismic risk reduction in its strategic and operational goals.

Responses were fairly positive concerning the extent to which sector development and post-disaster planning and programming enable integration of DRR (capacity gap of 1.51 / gap*importance assigned of 3.97). Based upon this score, as well as interviews carried out with various stakeholders, it appears that the Government is in the early stages of integrating DRR into national and sector development strategies, policies, and plans, and that the means are largely available to achieve the desired level of capacity.

The ranking of integration of DRR into sectors varied widely. Most respondents felt that the present system integrates DRR reasonably well into environment and natural resource policies and urban planning and building codes. The most significant gaps were related to the following areas:

- Rural development: some of the widest capacity gaps were related to this sector, including diversification of the population's income options in high-risk areas and protection of and their income and assets, food security in ensuring the resilience of communities to hazards, and utilization of DRR guidelines and monitoring tools in land-use policy and planning, and incorporation of DRR into rural development planning and management;
- Financial risk-sharing mechanisms, particularly insurance and reinsurance against disasters;
- Public-private partnership in DRR;

- The social sector: including integration of DRR into health sector planning and social safety-nets and recovery schemes to assist most vulnerable (poor, disabled, elders, etc.) and general population affected by disasters; and

- Resilience of critical public facilities and physical infrastructure to hazards.

Aside from integration of DRR into overall development policies and planning and specific areas, respondents were asked to what degree the present system incorporates DRR measures into post-disaster recovery and rehabilitation processes. The gap between current and desired capacity was significant, but not as high as for other areas related to HFA 4. However, when the importance assigned to this measure is factored in to the analysis, the need to address this issue becomes more apparent.

Proposed Responses

Given the low importance assigned to this priority area of action, the strong civil defense/rapid response orientation of the existing DRR system, and the fact that actions in this area are only beginning, there is an immediate need to **raise awareness and knowledge** among actors within the DRR system, as well as in national government sectors concerning the potential for sound development policies and planning to mitigate and prevent natural disasters.

As the integration of DRR into development policies and planning proceeds in Armenia, the range of actors involved will significantly expand to include critical sector, Marz, and local entities, in both the government and private sectors. This will make **coordination within and without the DRR system** (as noted above under HFA 1) all the more critical. The National Security Council appears best position to lead this process, given the large number of sectors involved and significant political will that will be required.

Risk assessment is strongly related to HFA 4 for the purpose of targeting prevention and mitigation interventions. In the initial stages, obvious high risk areas can be identified. However, as mainstreaming DRR progresses over the medium to long term, **precise hazard analysis and vulnerability assessment**, **combined with cost-benefit analysis of potential interventions**, will become increasingly critical.

Together with raising awareness and understanding the potential and benefits of integrating DRR, government actors at all levels world benefit from **technical assistance in mainstreaming of DRR into specific sectors, beginning immediately with rural development.** Technical assistance should emphasize **both non-structural and structural measures**, as there is presently a strong bias towards the latter, which may result in excessive expenditure for expensive infrastructure projects (such as flood embankments). Key areas include regional and local development planning for rural areas, off-farm employment, credit and market access, input access, land preparation, crop diversification, agronomy, irrigation and drainage management, (particularly in the Ararat Valley) soil salinity management, and (in mountain areas) pasture and rangeland management and agro-forestry.

Prevention and mitigation components of **local level risk management**, i.e. utilizing local resources and knowledge to reduce risk, should be supported in the short term. This was piloted in Ararat, Lori, and Tavush Marzes and should be replicated elsewhere. Capacity should be developed within the DRR system to facilitate these activities without international assistance.

Insurance markets have not yet reached the stage in which the widespread application of risk transfer mechanisms is feasible. This may occur in the long term after insurance market norms, proper regulation, and policy coordination among insurers have been strengthened. In the short term, World Bank may support a state catastrophe insurance facility. [8]

Public-private partnerships can contribute significantly to prevention and mitigation. Authorities can provide a framework for unleashing the full potential of private sector contribution, including advocacy, policies, and regulations to make business more disaster sensitive, incentives for business to become involved in DRR programs, and mechanisms whereby businesses and the authorities meet to discuss their respective roles and contributions.

Finally, **capacity for early recovery** should be developed. Early recovery bridges the gap between humanitarian and development phases of post-disaster assistance, helps communities to "build back better," and reduces dependence of communities through cash-for-work and other programs.

HFA Action 5: Disaster Preparedness for Effective Response at All Levels

Current and Desired Capacities

The assessment highlights that among the five HFA priority areas, disaster preparedness for effective response is considered as the one that currently has the weakest overall capacities. Preparedness for response in Armenia can count on legislation that establishes the roles and responsibilities at the central and local levels. However, the capacity assessment exercise shows that there is a lack of an overall common structure to manage emergencies and crisis, and although policies for coordination in preparedness and response do exist, they are still not fully applied.

Adequate policies are considered to be in place to develop, update and test preparedness and contingency plans. However, the assessment shows that these are not consistently applied. This area was also underscored as the one for which the highest desired capacity should be in place and suffers of the biggest gap between current and desired capacities.

Uneven scores were provided when enquiring the ability of the system to coordinate responses with regional and international partners, highlighting that there is willingness to cooperation but there are still some constraints. The question that scored the highest importance was to what extent there are technical and organizational capacities to manage disasters at regional (Caucasus), national and local levels. This is also the question which scored a big gap between current and desired capacities. When analyzing the local level, the development and implementation of the policy for disaster risk and emergency management is considered by respondents at its initial stage. The capacity assessment and the interviews conducted at the central and local level highlighted that resources and capacities of local level personnel for disaster preparedness and response are uneven. Additionally, respondents to the capacity assessment agreed that community engagement, participatory approaches and mechanisms to promote ownership at the local level are currently very weak.

The Reserve Funds for disaster preparedness and response are available only at national level and there is no such budget at the regional (Marz) or community level. In particular, respondents to the

[8] See: World Bank, Global Facility for Disaster Reduction and Recovery, 2009, *Disaster Risk Reduction and Emergency Management in Armenia*.

assessment highlighted low scores for DRR legislation and practice to promote development of emergency funds to support response, recovery and preparedness measure.

The assessment showed that there are very different perceptions of the extent to which existing policies and DRR system support dialogue, exchange of information, and coordination between entities focusing on DRR. Communication and information exchange was also considered as the second most important issue within HFA Action Area 5 and also scored the second highest desired capacity level.

Proposed Responses

Systematic planning which involves all relevant actors is the foundation for effective preparedness and response. Legislation, procedures, mechanisms, role and responsibilities need to be clear before a disaster happens as there will be no time during an emergency to create a functional and efficient system. **Capacities for the implementation of existing policy, strategy, and planning mechanisms** for disaster preparedness and response should be enhanced as well ensuring that **vertical linkages between central, regional (Marz), and community levels** are in place and functioning.

The development of a **national preparedness and response plan** for the major disaster threats is a measure to enhance capacities for response preparedness. The MoES would coordinate the national preparedness and response plan process, while including all relevant governmental and non governmental entities. As all plans, it will need to be tested by those entities and people that are likely to use it. Different sectors, Ministries, regional (Marz) and community should also develop their own contingency plans based on risk assessments and risk scenarios.

In order to do this regional (Marz) level and communities should be supported and receive the necessary guidance and tools to develop their own preparedness plans. These plans should outline the activities that should be done before, during and after a disaster occurs. Additionally, all population in risk areas should be aware of preparedness and contingency plans and exercise them through drills (for evacuation, first aid and early warning).

Regional and local communities should also receive sufficient information on **cross-border** issues and **cooperation** during preparedness and during emergencies. Cross-border cooperation in local level risk management should be enhanced and a plan to develop local level skills to do this should be developed and resources allocated.

The advocacy for the establishment of a national **Crisis Management Centre**, which is already underway in Armenia, should continue as it ensures that prompt and adequate response is provided to emerging crisis.

Resources for disaster preparedness and response need to be allocated at all levels. Advocacy should tackle the development of legislation that identifies the source of funding, which clarifies how additional resources can be accessed in case of an emergency, and how emergency funds can be replenished after their use at the national and regional levels. Advocacy should also sensitize that a small percentage of the regional budget (Marz level) is dedicated to emergency preparedness and recovery activities. Additionally, legislation should also cover how external funds are managed and how they reach the affected population.

Communities play a key role in reducing disaster risk and in preparedness for response, response and recovery. Therefore when looking at how to strengthen the national disaster preparedness capability, the increase of the capacities of communities should be taken into consideration. A strategy should be developed on how community capacities for preparedness for response and for recovery and should be boosted and how they should be used in case of an emergency. Communities need to understand their role within the national system and roles and responsibilities have to be clearly established from the beginning. Similarly, the use of **volunteer networks** (such as the Red Cross) should be explored and should receive adequate training and equipment before their use.

A framework for the use of **public/private partnerships**, for example for risk transfer through insurance schemes or for provision of emergency services, should be elaborated as a mean to increase national and community resilience capacities.

An inclusive **National Platform for Disaster Risk Reduction** could allow a within priority 5, the promotion of a clear procedure to document and share experiences and lessons learnt in preparedness, response and recovery and conduct post-disaster evaluations.

The development of a broad **community of practice**, including civil society, could be created to ensure that experiences are shared and harmonized at the local and regional (Caucasus) levels. This could be managed through the National Platform.

Before an emergency breaks out protocols and mechanisms of **information management** should be in place. This should include the development of a public information and media communication strategy.

In summary, a **capacity strengthening plan** should be designed to boost capacities at the national, regional (Marz), local government, and community level in disaster preparedness, response and recovery (including in Post Disaster Needs Assessment). Training material should be elaborated and adapted to address these different audiences.

Priority Recommendations for Action

Recommended actions for strengthening DRR capacities in Armenia can be considered in three major domains. Below they are presented with an estimated time-frame for implementation.

##	Capacity Development Action Plan	Implementation time-frame : **Short** – *1-2 years;* **Medium** – *2-3 years;* **Long** – *3-5 years*		
	I. Core functional (organizational) capacities	**SH**	**M**	**L**
1.	Establish and develop a National DRR Platform in Armenia, based on relevant best practice and existing needs		**X**	**X**
2.	Prepare and finalize a national DRR Strategy, with MoES leading the process, by engaging key stakeholders and developing clear strategic goals.	**X**		
3.	Specify current mandates, revise regulations, and develop procedures to clarify roles, responsibilities and rights, streamline the system, eliminate overlapping functions and help improve compliance level	**X**		
4.	Strengthen the rationale and advocacy for allocation of financial and other resources at the national and local level, based on actionable DRR results, aligned to the strategic goals		**X**	
5.	Facilitate the ongoing establishment of Crisis Management Center, which would improve information management system and overall coordination between DRR structures in Armenia		**X**	
6.	Develop and implement a national DRR public awareness strategy, based on the main issues and target audiences, with effective use of media, ICT and other technologies		**X**	
7.	Improve communication, information sharing, and strengthen vertical and horizontal linkages between DRR stakeholders at all levels	**X**		
8.	Develop and implement performance based human resource management system in DRR institutions, in line with national regulations for civil and local government services. Apply financial and non-financial incentives for attracting, developing and retaining capable staff.	**X**	**X**	
9.	Establish a common system for DRR monitoring and evaluation, with actionable indicators, overseen by MoES and reporting to the National Security Council.	**X**		
10.	Enhance capacities for implementation of DRR existing policies, strategies and plans at all levels	**X**		
11.	Develop and implement Capacity Strengthening Plan at all levels	**X**	**X**	

II. Technical capacities		SH	M	L
12.	Develop a National Disaster Observatory which will unify the disparate databases of various agencies	X		
13.	Develop common methodologies and procedures for risk analysis, as well as calibration and validation of assessments		X	
14.	Strengthen capacities for precise hazard analysis and vulnerability assessment, combined with cost-benefit analysis of potential DRR interventions		X	
15.	Improve the analysis of climate change impacts on society, economic sectors, and the environment.			X
16.	Develop and apply a common software platform and standards for GIS and mapping	X		
17.	Facilitate adoption of national GIS standards, based on best experience and needs of local stakeholders		X	
18.	Improve monitoring and forecasting systems			X
19.	To use existing systems and structures, including e-governance and School electronic network, cell phone networks for the purpose of disseminating early warning	X		
20.	Enhance DRR research capacities by integrating methodologies for risk assessment and cost-benefit analysis		X	
21.	Promote participation of key technical personnel at regional and international conferences and networks	X		
III. Community engagement and cooperation in DRR		**SH**	**M**	**L**
22.	Mainstream DRR at community level into planned changes to the legislation and institutional framework		X	
23.	Develop consistent policies and networks to promote the engagement and involvement of communities effectively in DRR		X	
24.	Develop effective strategies for promoting engagement of volunteers (especially at community level) in DRR, including provision of necessary training, guidance and equipment	X		
25.	Develop and apply GIS and hazard mapping at the regional (Marz) and community level to increase preparedness and informed decision-making for DRR management		X	
26.	Partner with the local schools and relevant authorities to increase meaningful engagement of schools in DRR preparedness.	X	X	
27.	In partnership with Ministry of Science and Education (MoSE) develop and implement an integrated strategy for enhancing and updating the DRR content of the curriculum.		X	
28.	Develop and implement innovative strategies for delivery of customized DRR training for teachers and instructors, using existing capacities of the CSMA and teachers' retreat facilities of MoSE	X	X	

29.	Develop and implement need-based local level DRR capacity development projects and programs, based on the positive results of pilot initiatives and with use of local resources	**X**		
30.	Provide technical assistance in mainstreaming of DRR into the local planning and budgeting, including development of "reserve funds" and plans for early recovery at Marz and community levels	**X**		
31.	Provide technical assistance in mainstreaming of DRR into specific sectors, including rural and urban development	**X**		
32.	Create incentives for private sector to actively participate in DRR activities at community level and also in policy dialogue through public private partnership programs and local initiatives	**X**		
33.	Promote establishment of catastrophe insurance facility (with support of the international organizations, like World Bank)		**X**	
34.	Engage private sector and banks in developing insurance and re-insurance schemes to transfer DRR risks where feasible			**X**
35.	Support further integration of Armenia into regional and international DRR networks through joint planning and information sharing	**X**		
36.	Engage local communities in cross-border cooperation programs in DRR, strengthen local cross-border networks for response and recovery		**X**	
37.	Expand data sharing and explore the possibilities for joint risk assessment of regional phenomena		**X**	
38.	Engage civil society and international organizations in active policy dialogue and community level initiatives on DRR	**X**		
39.	Create and manage a database of DRR projects and programs of local and international organizations, working in Armenia	**X**		
40.	Lead the dialogue and coordinate work of DRR donor organizations in Armenia. Systematically engage new donors and partners to support DRR activities in the country.	**X**		

Annex 1.

Ministry of Emergency Situations of Armenia. Institutional Profile

It is important to articulate the mandate, strategic objectives and operational goals of the target institution(s).

Institutional Profile	
Mandate	RA Ministry of Emergency Situations
Strategic goals	1. Development of a unified state policy in the areas of civil defense and protection of the population in times of emergency, including implementation of that policy; 2. Coordination of rescue operations, including post-accident rescue operations, fire extinguishing and priority urgent post-accident restoration activities; 3. Management and coordination of information flows, their summarization and decision making processes in view of making arrangements for civil defense and protection of the population in times of emergencies; 4. Study of phenomena, which trigger emergency events; 5. Organization and coordination of state expert examination of entities, objects, processes, engineering designs and solutions that might trigger emergency events; 6. Implementation of special permission issuing and supervisory functions within the powers reserved to the ministry by the national legislation; 7. Development of a state policy regulating the processes of civil defense and evacuation of the population in times of emergency; 8. Within the powers reserved to the ministry, organization and coordination of measures aimed at the prevention of emergency situations and elimination of consequences; 9. Development and management of state mobilization reserves; 10. Maintenance and servicing of the state reserve funds; 11. Implementation of measures aimed at the reduction of seismic risk; 12. Ensuring implementation of regular and ad hoc hydro-meteorological observations, studies and forecasts; 13. Coordination of activities actively affecting atmospheric events; 14. Ensuring of observance of technical security rules, which are based on scientific and technological progress and international expertise; 15. Coordination of emergency humanitarian response measures; 16. Coordination of activities aimed at educating the population about civil defense and population protection issues; 17. Ensuring that the population and administration bodies are notified of issues relevant to the protection of the population, as well as civil defense in times of emergency;

	18. Ensuring availability of social guarantees and legal protection of the employees working in the agencies reporting to the Ministry.
Operational Objectives	1. In the area of emergency situations: a) implementation of a unified state policy in the areas of civil defense, protection of population in times of emergency and technical security; b) submission of draft laws and other legal acts in due order of law to the RA Government and/or RA Prime Minister for consideration and approval; c) coordination of activities in the areas of civil defense, protection of population in times of emergency among central and local government bodies and organizations; d) within the limits of powers reserved to it, signing of international agreements in the areas of civil defense, protection of population in times of emergency and technical security; e) Organization and coordination of state expert examination of entities, objects, processes, engineering designs and solutions that might trigger emergency events; f) Creation, accumulation of financial, food, medical and other material reserves with a view of helping people that have suffered in emergency situations and in wars; g) Submission of a proposal to the Prime Minister of the Republic of Armenia regarding full or partial implementation of the plans on civil defense and protection of the population in emergency situations; h) Development of funding proposals for the implementation of civil defense measures and elimination of emergency situations, as well as and ensuring their use for that purpose; i) Within the limits of its powers, development of programs aimed at the prevention of development of emergency situations, reduction and elimination of possible consequences of emergencies, protection of the population in emergency situations and implementation of civil defense measures; j) Along with other government administration bodies, contribution to the development of concepts in the area of environmental protection; k) Ensuring of education of the population in the civil defense and emergency areas; l) Organization of technological research and engineering design activities, while acting as a client requesting implementation of these activities; m) Making arrangements in view of protection of state secrets while performing activities aimed at the avoidance and prevention of emergency situations, as well as the ones implemented in the area of civil defense;

	2. In the area of seismic protection: a) Coordination of seismic risk reduction activities throughout the territory of the Republic of Armenia; b) Confirmation of forecasts of earthquakes to occur in the territory of the Republic of Armenia and in other places found at a dangerous distance from Armenia; c) Approval of seismic zoning maps of the Republic of Armenia, including seismic micro-zoning and seismic maps for densely populated areas and entities of special, important and general significance; d) Confirmation of seismic risk expert evaluations prepared for entities of special, important and general significance; e) Participation in the operational assessment of the vulnerability of buildings and premises for the purpose of reduction of seismic risk in the high seismic risk areas. 3. In the area of establishment and management of state reserves: a) Submit proposals aimed at the improvement and development of the State Reserve Fund under the Government of the Republic of Armenia; b) Coordination of activities aimed at the preparation of itemized lists of supplies for the State Reserve Fund, including their available stock and accumulation norms; c) Ensuring of the implementation of state programs relating to the creation of supplies of the State Reserve Fund, including their accumulation, refreshment, loaning and substitution; d) Coordination of the policy development for the distribution of the State Reserve Fund's material supplies; e) Management of the State Reserve System; f) Financing of expenditures for the creation and maintenance of the State Material Reserve Fund in line with the articles of the State Budget of the Republic of Armenia; g) Establishment of control over the activities that have relevance to the State Material Reserve Fund; h) To develop and submit Annual and Prospective Draft Programs on the Accumulation of the Supplies of the State Reserve Funds, their refreshment and substitution to the Government of the Republic of Armenia for approval ; i) Ensuring of a unified stock-taking of the supplies in the State Reserve Fund in accordance with the established procedure; taking records of the available stock and its movements; preparation of summary reports on the available supply stock in the State Reserve Fund and submission of that information to the Government of the Republic of Armenia; 4. In the area of technical security:

	a) Establishing of technical security rules based on the scientific and technological achievements and international experience; b) Improvement of the technical security rules, establishment of a state control over provision of industrial security in the economy; c) Establishment of requirements for a secure organization of works, including the requirements for the design of machines and tools, their manufacturing and safe usage; 5. in hydrometeorology: a) Development of a state policy and strategy in the field of hydrometeorology and implementation thereof; b) Implementation of regular and ad-hoc hydro-meteorological observations, studies and forecasts; c) Implementation of measures actively affecting atmospheric events.

Part I: Horizon Scan

The horizon scan takes into account the political, economic, social and cultural context in which capacities are to be developed.

Below are a few examples of questions that may be relevant in the context of Disaster Risk Reduction these questions must be tailored (amended, added to, prioritized) to the given context. Comments should include "Yes" or "No" answers and provide detailed information related to the given department.

Horizon Scan		
Question		**Comment**
1	Does national legislation or policy specify the mandate of the Agency regarding delivery of Disaster Risk Management?	• Yes, RA Government Decree on Establishing a Ministry of Emergency Situations of Armenia and Approving the Statue and the Structure of that Ministry; N 531-N of 15.05.2008
2	Is there national legislation or policy specifying how (the process of) program planning should occur at the National level?	• Yes, the RA Law on the Protection of the Population in Times of Emergency, 29.12.1998, HO-265
3	Is there national legislation or policy specifying how (the process of) program planning should occur at the local level?	• Yes, the RA Law on the Protection of the Population in Times of Emergency, 29.12.1998, HO-265 • Regional and Municipal Plans for the Protection of the Population in Times of Emergency
4	Is there national legislation or policy specifying how (the process of) Disaster Risk Management should occur at the National level?	• Yes, the RA Law on the Protection of the Population in Times of Emergency, 29.12.1998, HO-265
5	Is there national legislation or policy specifying how (the process of) Disaster Risk Management should occur at the local level?	• Yes, the RA Law on the Protection of the Population in Times of Emergency, 29.12.1998, HO-265
6	Is there national legislation or policy that specifies inter-sector coordination and	• Yes, the RA Law on the Protection of the Population in Times of Emergency,

	collaboration at the National level?	29.12.1998, HO-265
7	Is there national legislation or policy that specifies that public consultations must be undertaken by National Agencies?	• Yes, the RA Law on the Protection of the Population in Times of Emergency, 29.12.1998, HO-265 • RA Government Decree N 1494-N of 29.11.2004 on Establishing a Procedure of Notification of Administrative Bodies and the Population
8	Is there national legislation or policy that specifies that public consultations must be undertaken by Local administration?	• Yes, RA Government Decree N 1494-N of 29.11.2004 on Establishing a Procedure of Notification of Administrative Bodies and the Population
9	Is there national legislation or policy that specifies inter-sector coordination and collaboration at the National level?	• RA Government Decree N 1494-N of 29.11.2004 on Establishing a Procedure of Notification of Administrative Bodies and the Population
10	Is there national legislation or policy that specifies inter-sector coordination and collaboration at the local level?	• Yes, Decree of the Ra President N NH -728 of 6.05.1997 on the Government Administration in the RA Regions,
11	Is there national legislation or policy that specifies responsibilities for monitoring and evaluation of Disaster Risk Reduction (including the means and frequency of doing so)?	• RA Government Decree on the Establishment of a System of Continual Monitoring over the Radiation, Chemical and Microbiological Background/situation and of a Procedure for Conducting this Activity, N 1064-N 29.07.2004 • Nothing in the area of natural disasters.

Annex 2.

Stakeholder Analysis and Institution-gram of five agencies working under Ministry of Emergency Situations of Armenia (MoES)

1. State Hydrometeorology and Monitoring Service of Armenia (SHMS)

Status *State non-commercial organization (SNCO)*

Role in the DRR system in Armenia

The objective of the SHMS is to inform state agencies, general population and economic agents on actual hydro meteorological conditions and expected changes, to provide information on current and future climate status in order to reduce potential risks and damage from unpleasant hydro meteorological conditions and implement preventive measures to mitigate potential negative human impact on nature.

Stakeholders:

1. **Armenia Rescue Service (ARS)**
2. **Ministry of Agriculture (MoAg)**
3. **Ministry of Energy and Natural Resources (MoENR)**
4. **Ministry of Transport and Communication (MoTC)**
5. **Ministry of Nature Protection (MoNP)**
6. **Ministry of Health (MoH)**
7. **Ministry of Urban Development (MUD)**
8. **Ministry of Territorial Administration (MTA)**
9. **State Committee for Water Management (SCWM)**
10. **Regional Governments (10 regions)**
11. **Ministry of Defense (MoD)**
12. **Ministry of Emergency Situations (MoES)**
13. **National Seismic Protection Service (NSPC)**
14. **Airports**
15. **Armenian Nuclear Power Station (ANPS)**
16. **Chemical enterprises**
17. **"ArmRusGazArd" Gas Company (ARG)**

Stakeholders Table

Importance of stakeholder

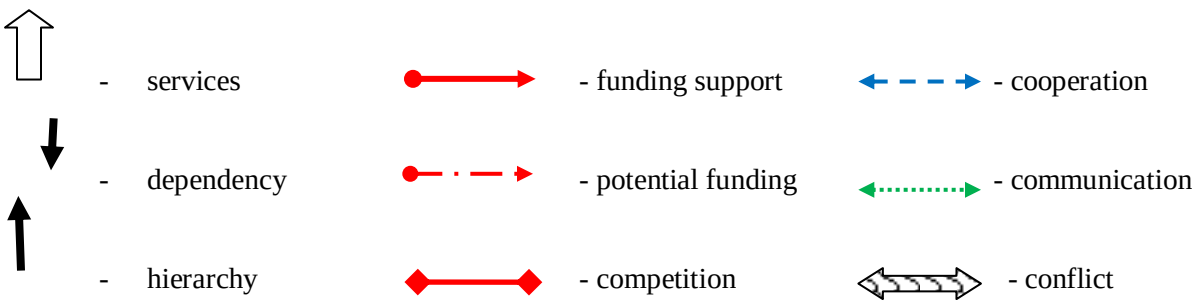
	Low	Medium	High
High		*4- MoTC ;* *14 - Airports*	*1 – ARS* *2 – MoAg* *12 - MoES*
Medium	*13 – NSPC;* *15 - ANPS*	*3 – MoENR;* *8 – MTA;* *9 – SCWM;* *10 – Reg.gov-s*	*11 - MoD*
Low	*16 – Ch. enterprises;* *17 - ARG*	*5 – MoNP* *6- MoH* *7- MUD*	

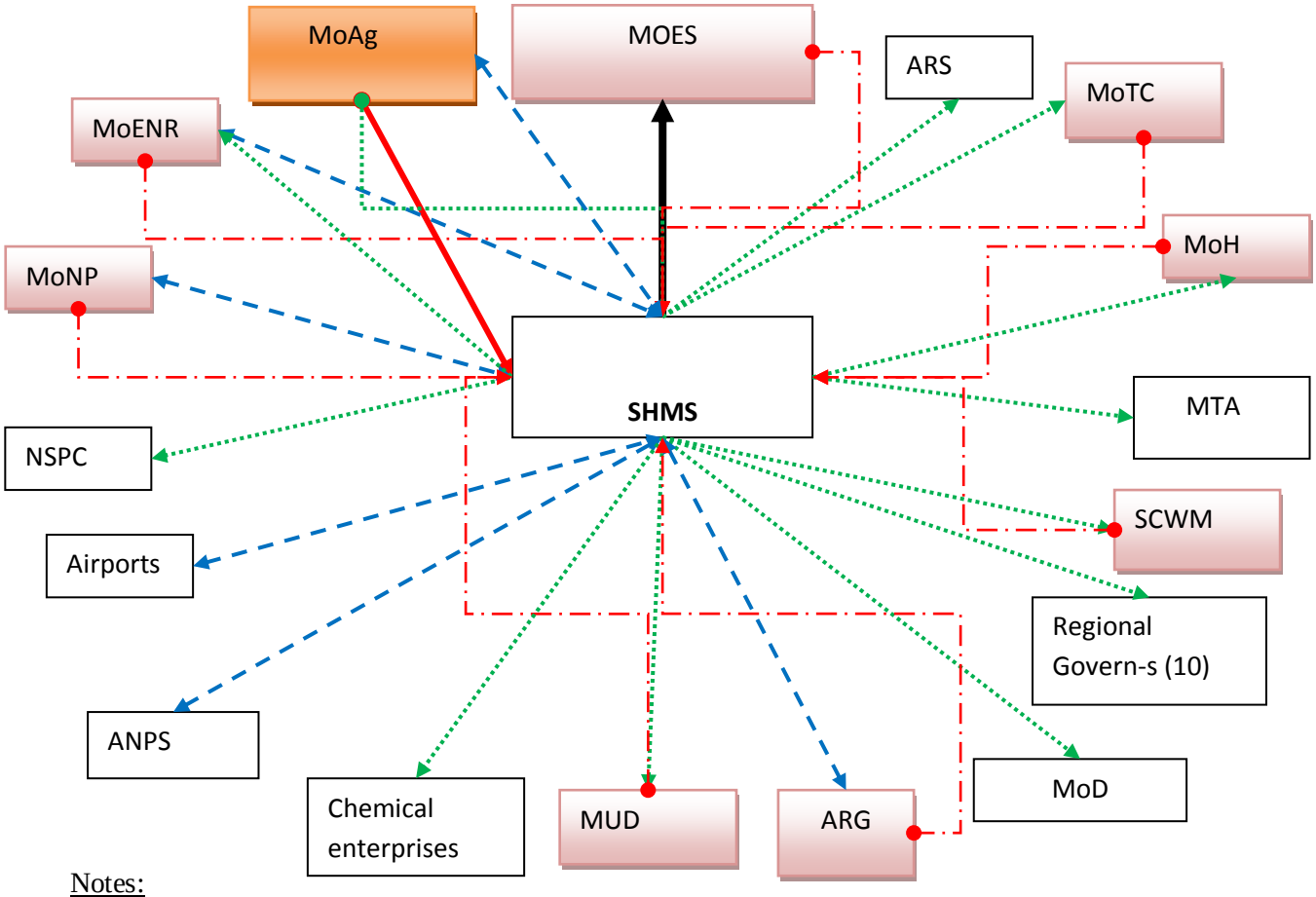
Stakeholder Influence

Institution-gram

(Visualization of relations between actors)

Description of relations:





Notes:

SHMS provides services to all stakeholders mentioned above and general public. It has an extensive network of information gathering technical points throughout the country, which are functioning in connection with a modern center for satellite information reception and analysis. SHMS has an extensive data base collected for quite a long period of time. It possesses a capacity and technology for reliable short- and medium-term prognoses.

Issues:

- Lack of funding for organizational development, including staffing and equipment;
- Relationships between SHMS and MoES as "responsible state body" need clarification;
- Some equipments are outdated and need modernization;
- Staff salaries are quite low and motivation is decreasing;
- There are many opportunities for fund-raising which need to be actively explored. In the above picture potential sources of funding are highlighted.

2. National Technical Safety Center

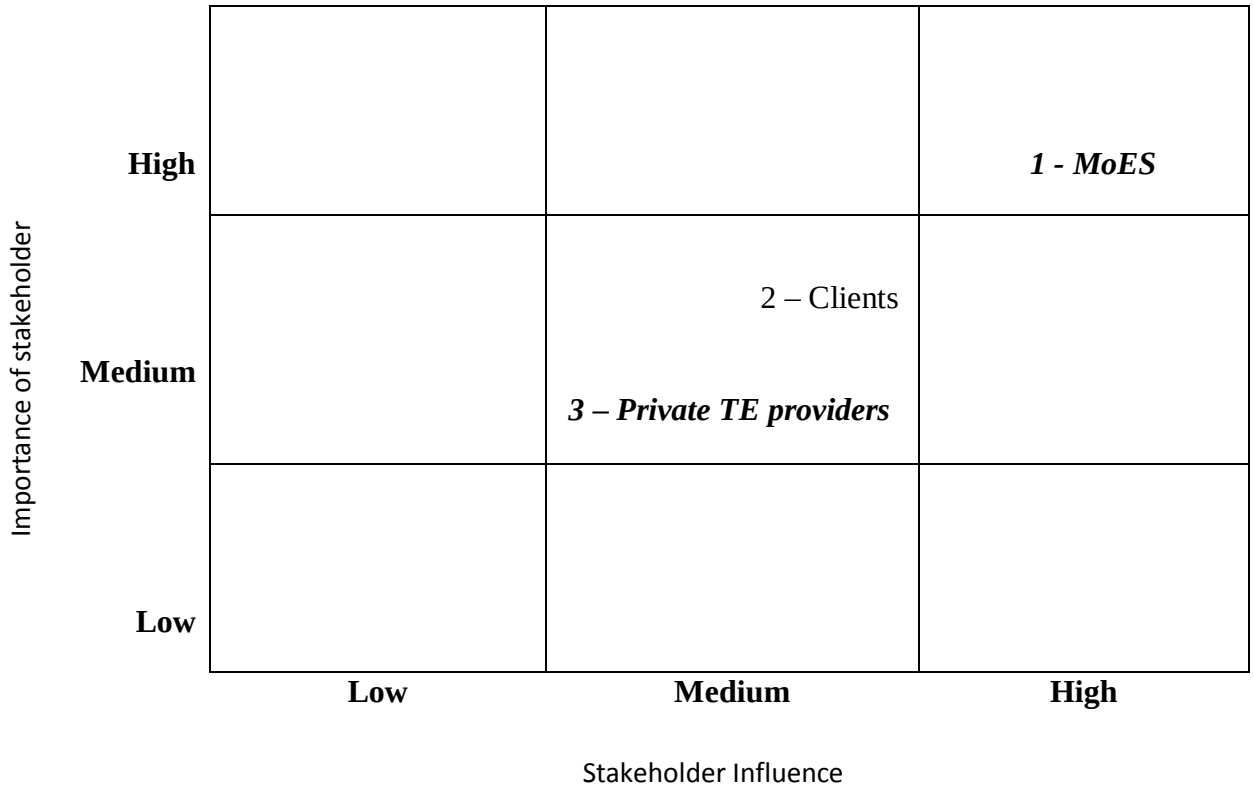
Status *State Non-commercial organization (SNCO)*

Role in the DRR system in Armenia

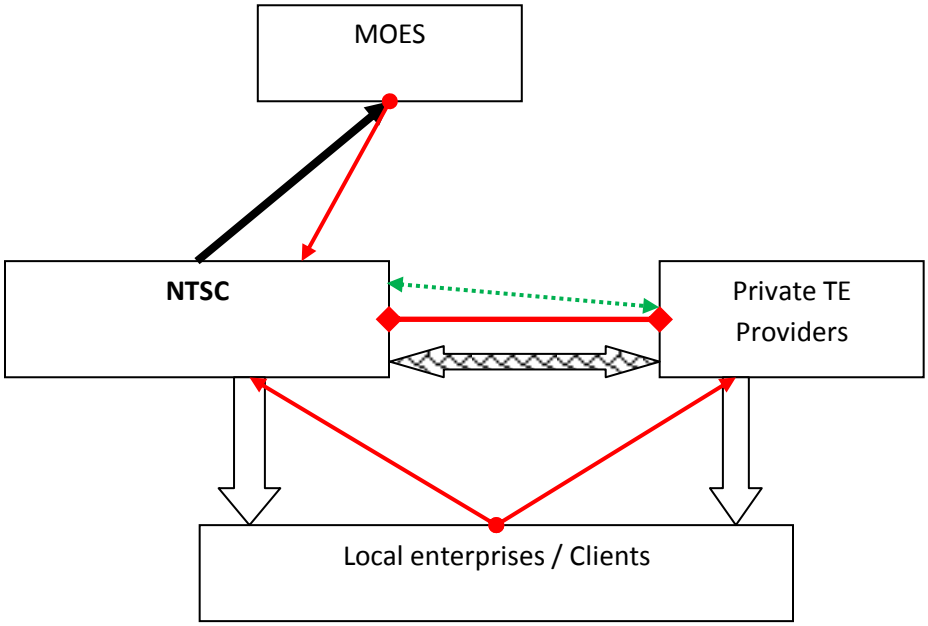
National Technical Safety Center was formed in 200 by the Decree of the Government of Armenia. The goal and area of work of NTSC is an implementation of functions to prevent technical disasters in industrial dangerous objects working on the territory of the Republic of Armenia.

Stakeholders:

1. **Ministry of Emergency Situations (MOES)**
2. **Client enterprises of NTSC**
3. **Private companies, providers of technical safety expertise - competitors**



Institution-gram



Notes:

NTSC has 9 regional departments and 3 specialized divisions located in Yerevan. It serves more then 3000 enterprises with about 4000 objects in the country. NTSC receives annually about 52M AMD (about USD 140K) from the state budget, which represents about 10% of total revenues of the center. The rest is generated from service provision. Due to competition from other 3 private service providers and also of negative impact of Financial Crises, the center had to decrease service prices, which resulted in 30% of loss of revenues last year.

NTSC is well functioning and autonomous organization. It looks to strengthen its position in the country and looks to establish connections with peer organizations in Europe and other developed countries for exchange and cooperation.

Issues:

- Coordination and communication between structure within MoES is happening through bi-weekly meetings;
- No special staff appointed at the MoES to work with NCTS, communication happens with different people, and mainly between Minister and the Head of NTSC;
- Regular communication, exchange with other agencies within the MoES does not exist;
- Lack of plans and strategies for staff capacity development.

3. National Seismic Protection Service Agency (NSPS)

Status *Special agency within the Ministry of Emergency Situations (part of the MoES)*

Role in the DRR system in Armenia

NSPS was formed in 1991 by the Decree of the Government of Armenia to mitigate the earthquake risk and organize seismic protection of population in Armenia. The main objectives of NSPS include assessment of the earthquake dangers and risks in Armenia and earthquake risks reduction. NSPS implements its tasks through four regional branches, which are located in different parts of the Armenia.

Stakeholders:

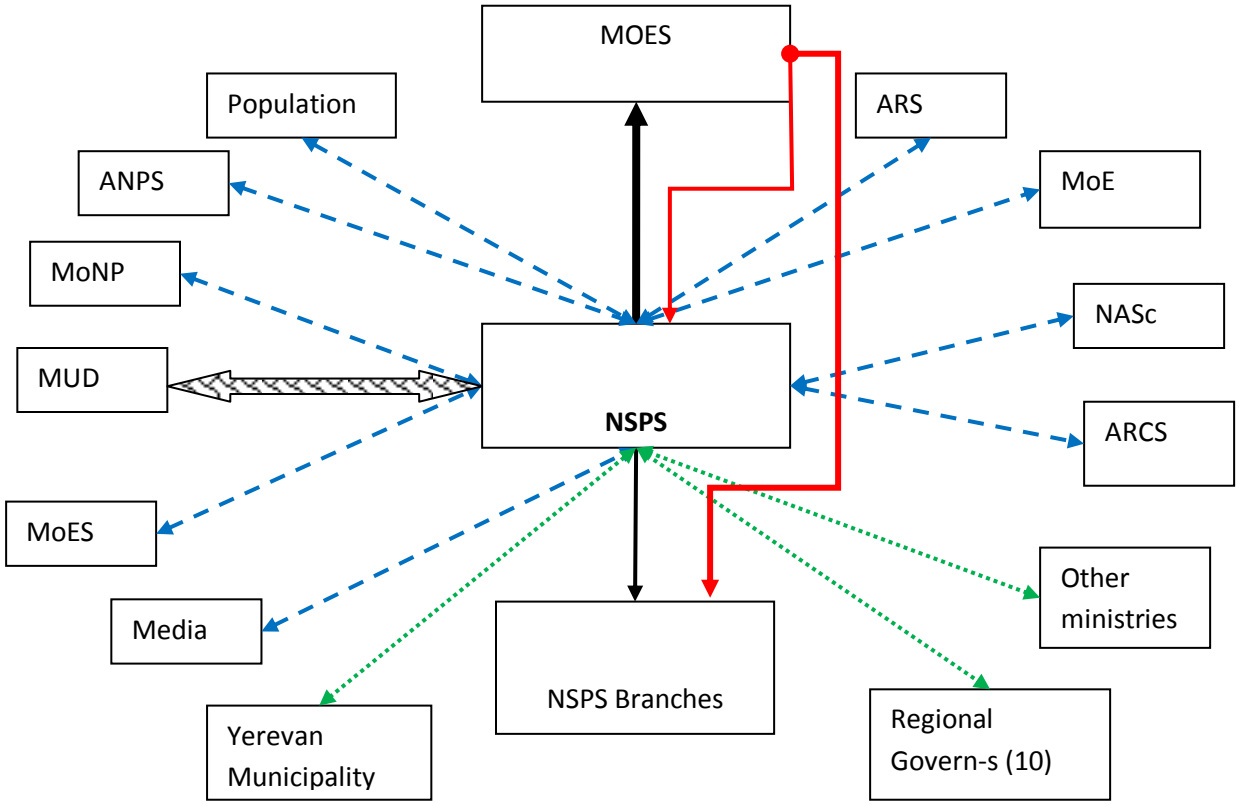
1. **Ministry of Emergency Situations (MOES)**
2. **Four regional branches (State non-commercial organizations)**
3. **Ministry of Urban Development (MUD)**
4. **Ministry of Science and Education (MoSE)**
5. **Ministry of Nature Protection (MoNP)**
6. **Ministry of Economy (MoE)**
7. **Other Ministries**
8. **Yerevan Municipality**
9. **Regional Governments (10 regions)**
10. **Armenia Nuclear Power Station (ANPS)**
11. **National Academy of Science (NASc)**
12. **Armenian Red Cross Society (ARCS)**
13. **Media**
14. **Population**
15. **Armenian Rescue Service (ARS)**

Stakeholders Table

Importance of stakeholder			
High	*14 – Population;* *15 - ARS*	*2 – NSSD branches;* *11 – NASc;*	*1 - MoES*
Medium	*3 – MUD;* 4 – MoSE	**5- MoNP** 6- MoE; 10 – ANPS; 12 - ARCS	
Low	*7 – other Ministries;* *8 – Yerevan Municip* *9 – Regional Gover-s;*		

Low	Medium	High

Stakeholder Influence



Notes:

NSPS has unique potential which was carefully created since 1991. It has a good reputation among international peer organizations and regional partners. NSPS had different stages of development. At times it was part of the Ministry of Territorial Administration. According to the staff of NSPS, during that period, NSPS enjoyed greater support and development as organization and strengthened its capacity. NPSP still possesses qualified and committed staff, which continues remaining with the organization despite low salaries and lack of supportive working conditions.

Issues:

- Lack of funding for organizational development, including staffing and equipment;
- Unclear vision and role of the NSPS vis a vis other agencies of MoES;
- Lack of cooperation, sometimes competition with ARS (organizing INSARAG, participating in donor funded projects, information sharing, etc.);
- On-going debate, conflict with Ministry of Urban Development on building code and seismic standards;
- Lack of political support to promote NSPS agenda with the Government;

- Lack of communication with regional authorities;
- Unclear relations between NSPS and regional branches;

4. National Reserves Agency (NRA)

Status *Special agency within the Ministry of Emergency Situations (part of MoES)*

Role in the DRR system in Armenia

Main role of NRA in the DRR system is to support effective response to natural disasters and man-made emergencies. NRA creates, accumulates food, medical, fuel, commodity and other stocks for providing them in accordance with the decision of the Government of Armenia to the victims of emergencies. NRA is a part of MoES (authorized state body) and supervises work of one SNCO and two enterprises.

Stakeholders:

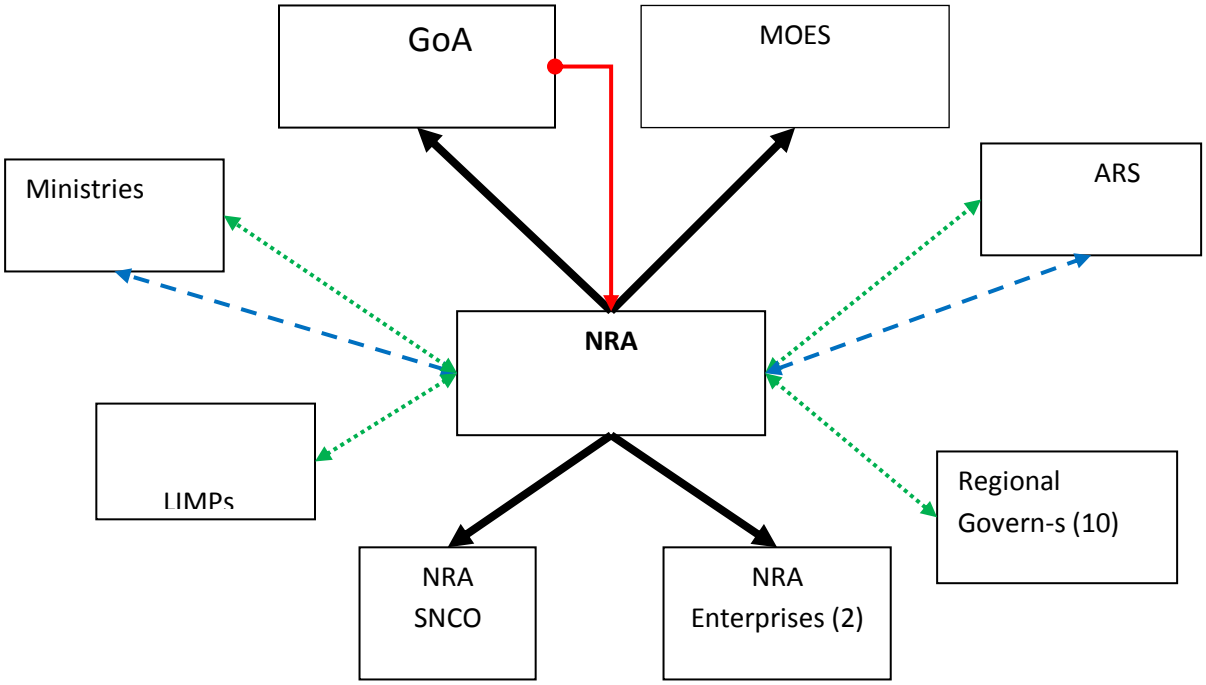
1. **Ministry of Emergency Situations (MoES)**
2. **Government of Armenia (GoA)**
3. **Ministries**
4. **Armenia Rescue Service (ARS)**
5. **NRA State non-commercial organization – (NRA-SNCO)**
6. **NRA Enterprises (2)**
7. **Large importers – (LIMP)**
8. **Regional Governments**

Stakeholders Table

Importance of stakeholder	Low	Medium	High
High		*3 – Ministries* *4 – ARS* *8 – Regional Gov-s*	*2 – GoA* *1 - MoES*
Medium	*7 - LIMPs*	*5 – NRA SNCO* *6 – NRA Enterprises (2)*	
Low			

Stakeholder Influence

Institution-gram



Notes:

NRA has approached the GoA with several legislative initiatives, including a law on creation of "rapid response stock" and "simplified provision of assistance" for immediate and small scale emergencies. It also suggested to create a "European type" commodity stock database, which will include all reserves available in the country in any given moment of time.

Issues:

- Unclear role of the NRA within the system of GoA;
- Need to improve current legislation on state reserves management;
- Clarification of relations with private companies, large food and commodity suppliers;
- HR problems, decreasing motivation of staff (which is partly caused by current regulations of civil services system). Best specialist leave agency for commercial sector.

5. Armenian Rescue Service (ARS)

Status *State Agency of Rescue Service under the Ministry of Emergency Situation of the Republic of Armenia (State/governmental body)*

Role in the DRR system in Armenia

Armenian Rescue Service (ARS) is a state body which is in charge of the following:

- Prevention of emergency situations;
- Mitigation and elimination of potential impact of emergency situations;
- Implementation of civil defense measures;
- Protection of people and economic infrastructure during emergency and war situations;
- Organization and implementation of rescue and emergency rescue work;
- Immediate recovery response, fire-fighting and other activities.

Stakeholders:

1. **Government of Armenia - GoA**
2. **Ministries of the Republic of Armenia (including MoES)**
3. **Regional Governments**
4. **Self-governance bodies (municipalities and local councils)**
5. **Other organizations**
6. **MoES structures (NSPS, NRA, SHMS, NTSC)**

Notes:

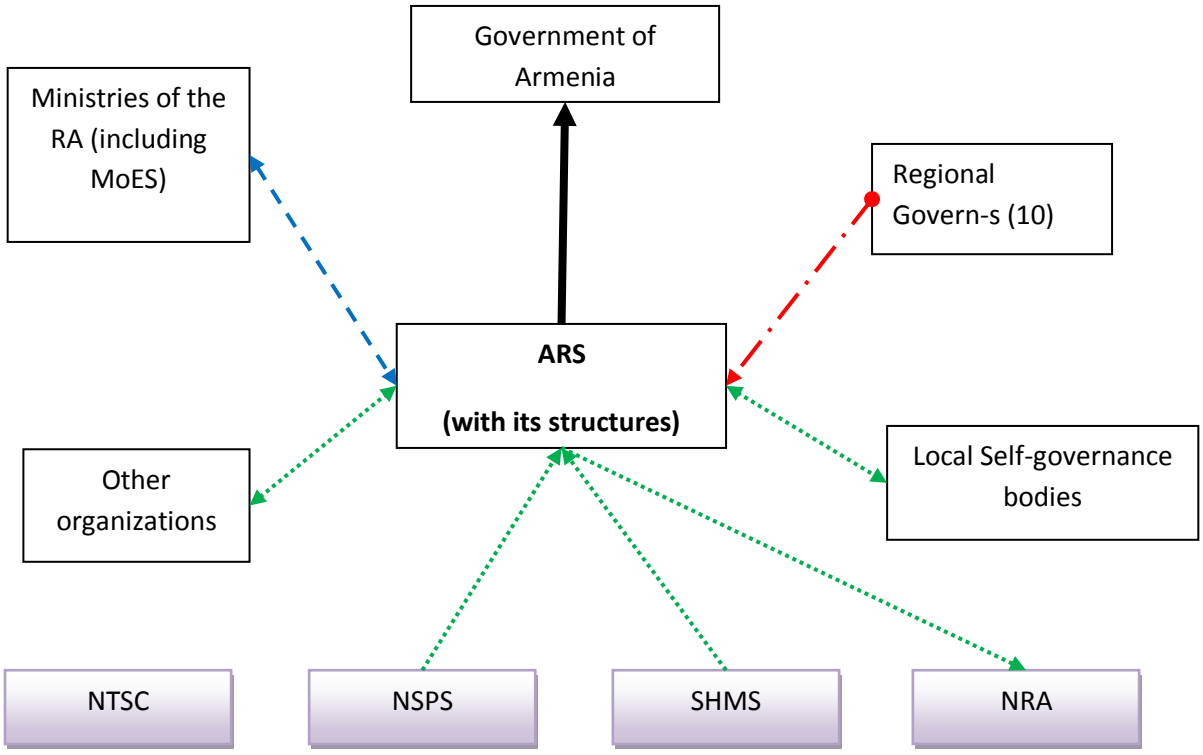
ARS as other agencies of the MoES has been impacted by multiple structural changes and re-organizations within the Government of Armenia during last fifteen years. ARS status and place in the government system was changing quite often. Despite these changes, ARS currently is well established and functioning structure, one of the core elements of MoES and DRR system in Armenia. It enjoys high reputation within the country and in the region as one of the strong and reliable professional organization in the field of DRR and emergencies.

Issues:

- Not fully finished re-organization within the MoES;
- Obvious duplication of functions of MoES and ARS;
- Increase of administrative staff, increased overhead costs;
- Professional staff leaving ARS, loss of professionalism within the organization;
- Lack of engagement of regional and municipal structures in DRR work;
- Lack of funding for “nice ideas”;

- Lack of Law on Rescue Service.

Institution-gram



Annex 3.

Disaster Risk Reduction (DRR) system in Armenia

Vision

(common vision developed by participants of the workshop of DRR agencies, conducted Jan 26, 2010)

Our aim is an effective, efficient, sustainable and self-developing Disaster Risk Reduction (DRR) system in Armenia, which is able to systematically address existing and emerging disaster risks in the country, maintaining inclusive and coordinated mechanisms for risk identification, assessment and early warning, implementing risk reduction measures and increasing preparedness for effective response and recovery.

At the heart of the DRR system in Armenia is the National DRR Platform, which provides clear vision, strategies and role for all DRR agencies and stakeholders, under overall leadership and coordination of the Ministry of Emergency Situations of Armenia. Implementation of the National DRR Platform is in line with international and regional strategies, such as Hyogo Framework for Action and other international conventions; it is supported by effective legislation, which creates enabling environment for DRR activities at all levels.

Effective DRR system is well integrated in the regional and international DRR systems and structures, with strong ties and cooperation established with different international and local partners. DRR system is deeply rooted in local communities with increasing capacities to mobilize local resources, including community based organizations and volunteers and engaging schools and other local institutions in increasing DRR awareness and preparedness at all levels. DRR system employs open and transparent management and decision-making approach, with continuous focus on capacity development and enabling of the staff, decentralization of decision-making and empowerment of local actors. It is well equipped with human, financial and technical resources to effectively deliver quality services to the general population and different stakeholders.

Annex 4.

Strategic Capacities for Effective DRR System in Armenia

(results of brainstorming exercise of DRR organizations of Armenia)

1. Developed effective National DRR Platform
2. Inclusive and effective DRR Strategy for the whole country and for regions
3. Developed supportive legislation (enabling environment) for DRR
4. Effective implementation of existing legislation
5. Consolidation of organizations and structures of DRR in Armenia
6. DRR system-wide (country-wide) planning and situation management
7. Common/shared vision and approaches to achieve goals and objectives
8. Improved state system and structures for DRR, including government and non-government structures, administration, governance, planning, management, budgeting, monitoring and control functions
9. Clear division of roles and responsibilities of all DRR institutions/organizations
10. Sufficient capabilities, including human and financial resources for DRR activities
11. Effective methods for DRR public awareness and education
12. DRR training and preparedness of the population
13. Integration into regional and international DRR systems
14. Effective cooperation at all levels, including inter-agency cooperation and community networking
15. Unified methodologies and approaches for DRR components and systems
16. Clear and transparent leadership and management
17. Professional and motivated staff
18. Up-to-date technology, methods and equipment
19. Reliable and functioning Management Information Systems and Database for DRR
20. Flexibility and adaptability of DRR systems and structures

Annex 5.

Assessment of Disaster Risk Reduction System

ARMENIA

Date Conducted: 1 February 2010

Part III: Capacity Assessment Tool for Disaster Risk Reduction (DRR) - Based on the Hyogo Framework for Action 2005-2015

Introduction to Capacity Assessment Tool for the DRR System of Armenia.

Completing this Capacity Assessment Tool is a part of the capacity development process that started in December 2009 with briefing of the Ministry of Emergency Services (MoES) and the 5 key agencies. Following this a stakeholder analysis was conducted. In January 2010 an institutional profile and horizon scan was completed by MoES and the 5 key agencies. At the Strategic Capacity Vision workshop in the last week of January a draft vision for the DRR system in Armenia was developed and strategic capacities identified.

This capacity assessment tool has been designed specifically to assess technical and functional capacities of the Disaster Risk Reduction (DRR) System of Armenia. It has been prepared based on the 5 actions in Hyogo Framework for Action 2005-2015.

The rating scale of 1 to 5 when completed will then become the baseline of existing capacity for the DRR system and the desired level of capacity the target against which progress will be measured. Following completion the responses will be collated to allow interpretation and triangulation from which capacity development responses and strategies will be developed.

Instructions on completing the Capacity Assessment Tool:

1. Read the HFA action, all of the questions below this will relate to this action.
2. Read the HFA key activity
3. Read the capacity indicator question (left hand column)
4. Read the baseline level of **existing** capacity in the 5 boxes.
5. Once you have decided which is the most relevant of the 5 boxes for the existing capacity, please tick that box (tick one box only)
6. Using the same list of criteria decide which is the most relevant level of **desired capacity**, write the number that represents this in the right hand column
7. Lastly, briefly consider the importance of the capacity for DRR in Armenia (**H**igh, **M**edium or **L**ow) and add either H,M or L in the right hand column
8. If you have any comments please add these in the space provided
9. Then move onto the next the capacity indicator question (left hand column in the row below) and repeat the above process from bullet 3
10. If you have no knowledge at all on a particular capacity please leave the row blank and move to the next one.
11. If you need clarification or need further information please ask any member UNDP DRR CA team.
12. When you have finished please hand the completed assessment tool to a member of the UNDP DRR CA team.

Thank you for your contribution.

A. Capacity for Governance: organizational, legal, and policy frameworks. **HFA Action 1. Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation**							
Capacity Indicators		**Baseline: Level of Existing Capacity**					**Target: Level of Desired Capacity. Importance of Capacity[9]**
		1	2	3	4	5	
HFA 1 Key activity (i) National institutional and legislative frameworks							
a	To what extent is there an legislative and regulatory framework in place for the DRR system	No legislative and regulatory framework in place	Out dated and incomplete legislative and regulatory framework in place	Review of the legislative and regulatory framework conducted and a prioritized plan to revise is approved	50% legislative and regulatory framework is revised and approved with 100% compliance	100% legislative and regulatory framework is revised and approved with 100% compliance	
a	To what extent is there an integrated institutional framework in place for engagement, consensus building and coordination for the DRR system	No institutional framework in place	Out dated and incomplete institutional framework in place	Review of the institutional framework conducted and multi-sectoral national platform designed and approved	National platform established and resourced as a national mechanism for policy and coordination with 50% of stakeholder engagement	National platform established and resourced as a national mechanism for policy and coordination with 100% of stakeholder engagement	
b	To what extent are DRR issues integrated into national policies, strategies and plans?	No integration of PRR issues into national policies, strategies and plans.	Ad-hoc integration of PRR issues into national policies, strategies and plans.	Review of the integration of PRR issues into national policies, strategies and plans conducted and prioritized plan approved.	Integration of PRR issues into 50% of prioritized national policies, strategies and plans conducted	Integration of PRR issues into 100% of prioritized national policies, strategies and plans conducted	

[9] A realistic date can be set for desired capacity e.g. use the HFA date of 2015

c	To what extent are there regulations and mechanisms in place to encourage compliance with legislation and promote undertaking of risk reduction and mitigation activities?	No regulations/ mechanisms to encourage compliance and promote undertaking of risk reduction and mitigation activities	Ad-hoc regulations/ mechanisms to encourage compliance and promote undertaking of risk reduction and mitigation activities	Regulations/mechanisms developed/approved to encourage compliance and promote undertaking of DRR and mitigation activities	50% implementation/compliance with the approved regulations and mechanisms for undertaking risk reduction and mitigation activities	100% implementation/compliance with the approved regulations and mechanism for undertaking risk reduction and mitigation activities	
d	To what extent are responsibilities and resources decentralized for sub-national DRR to reflect local risks and patterns.	No institutional and legal framework for decentralized responsibilities and resources for DRR	Ad-hoc out dated institutional and legal framework for decentralized responsibilities and resources for DRR	Review and revision of institutional and legal framework for decentralized responsibilities and resources for DRR conducted and approved	50% revision of institutional and legal framework for decentralized responsibilities and resources for DRR with 100% compliance	100% revision of institutional and legal framework for decentralized responsibilities and resources for DRR with 100% compliance	
HFA 1 Key activity (ii) Resources							
e	To what extent is HRM data and HRM planning utilized in the DRR system to assess existing HR capacities at all levels and develop responses to meet current and future requirements?	No HRM data and planning system in place to develop HR capacities.	Ad-hoc use of HRM data and planning system to develop HR capacities.	HRM planning system and data base designed and piloted to assess and develop required capacities.	HRM system used to assess and develop required HR capacities for DRR in 50% of key organizations.	HRM system used to assess and develop required HR capacities for DRR in 100% of key organizations.	

f	To what extent has the DRR system have adequate budget management systems to allocate resources aligned to priorities and results of DRR policies and programs to all key stakeholders at all levels	No clear systems to prepare and execute the budget aligned to priorities and results of DRR policies and programs.	Ad-hoc systems to prepare and execute the budget aligned to priorities and results of DRR policies and programs	Budget systems are designed and piloted to prepare and execute the budget where allocations are aligned to priorities and results of DRR policies and programs.	Budget systems are 75% complied with to prepare and execute the budget where allocations are aligned to priorities and results of DRR policies and programs.	Budget systems are 100% complied with to prepare and execute the budget where allocations are aligned to priorities and results of DRR policies and programs.	
g	To what extent is political support provided for integration of DRR priorities into development planning?	No senior government staff participation to promote DRR priorities in development planning.	Ad-hoc senior government staff participation to promote DRR priorities in development planning.	Senior government staff use the national platform, to identify opportunities to promote and integrate DRR.	Senior government staff actively participate at a strategic level to promote DRR priorities in 50% of development planning.	Senior government staff actively participate at a strategic level to promote DRR priorities in 100% of development planning.	
HFA 1 Key activity (iii) Community Participation							
h	To what extent are policies in place for community stakeholder engagement, consultation and networking for DRR?	No approaches and actions for community stakeholder engagement, consultation and networking.	Ad-hoc approaches and actions for community stakeholder engagement, consultation and networking.	Policies and priority actions designed and piloted for community stakeholder engagement, consultation and networking	Policies and priority actions for community stakeholder engagement, consultation and networking being conducted in 50% communities.	Policies and priority actions for community stakeholder engagement consultation and networking being conducted in 100% communities.	
h	To what extent are there strategies in	No volunteer management	Ad-hoc volunteer	Volunteer management strategy	Volunteer management strategy with clear roles	Volunteer management strategy with clear roles	

	place for the management of volunteers to participate in DRR	strategy.	management strategy without clear roles and responsibilities.	developed and piloted with clear roles and responsibilities, the delegation of authority and resources.	and responsibilities, the delegation of authority and resources implemented in 50% of communities	and responsibilities, the delegation of authority and resources implemented in 100% of communities	
B. Risk Identification, assessment, monitoring and early warning HFA Action 2. Identify, assess and monitor disaster risks and enhance early warning							
	Capacity Indicators	**Baseline: Level of Existing Capacity**					**Target: Level of Desired Capacity. Importance of Capacity**
		1	2	3	4	5	
HFA 2 Key activity (i) National and local risk assessments							
a	To what extent does the DRR system have the capacity to develop, update and disseminate risk maps and related information to decision makers, general public and communities at risk	No systems for risk maps to be accessible by target groups	Ad-hoc systems for risk maps to be accessible by target groups	Risk map database is designed and piloted for risk maps to be accessible and understandable for all target groups including communities at risk.	Risk map database is updated at agree frequency and is accessible and understandable to 75% of all target groups including communities at risk.	Risk map database is updated at agree frequency and is accessible and understandable to 100% of all target groups including communities at risk.	
b	To what extent does the DRR system have the capacity to develop systems to assess impact of disasters on social economic and	No system of indicators for disaster risk and vulnerability for decision-makers to assess the impact of	Ad-hoc system of indicators for disaster risk and vulnerability for decision-makers to assess the impact	A system of indicators for disaster risk and vulnerability are designed and piloted for decision-makers	A system of indicators for disaster risk and vulnerability are 75% utilized by decision makers and	A system of indicators for disaster risk and vulnerability are 100% utilized by decision makers and	

	environmental conditions at a national and sub-national level?	disasters.	of disasters.	to assess the impact of disasters.	the results disseminated to decision makers, public and populations at risk.	the results disseminated to decision makers, public and populations at risk.	
C	To what extent does the DRR system have the capacity to record, analyze and disseminate statistical information on disaster occurrence, impacts and loses?	No statistical recording, analysis and reporting on disaster occurrence, impacts and loses.	Ad-hoc statistical recording, analysis and reporting on disaster occurrence, impacts and loses.	Statistical information system designed and piloted to produce and disseminates regular summaries on disaster occurrence, impacts and loses.	Statistical information system produces and disseminates regular summaries through national and local mechanisms	Statistical information system produces and disseminates regular summaries through international, regional national and local mechanisms	
HFA2 Key activity (ii) Early Warning							
d	How well does the DRR system ensure early warning systems that are timely, understandable to those at risk, including guidance on how to act and support effective operations by disaster managers?	No early warning system	Ad-hoc early warning system that does not reach all target audiences or effectively support disaster management operations	Design and piloting of an early warning system that takes into account democratic, gender, cultural and livelihoods of the target audiences that are at risk and supports effective disaster management operations.	Timely and understandable early warning system that reaches and is understood by 75% of target audiences that are at risk and supports effective disaster management operations.	Timely and understandable early warning system that reaches and is understood by 100% of target audiences that are at risk and supports effective disaster management operations.	
e	How well does the DRR system review and maintain information systems as part of the	No information system as part of early warning	Ad-hoc information system as part of early	Design and establish information systems as part of early warning system to	75% coverage of information systems to ensure rapid and coordinated action	100% coverage of information systems which are regularly reviewed to ensure	

	early warning system to ensure rapid and coordinated action is taken in the case of alert / emergency?	system	warning system	ensure rapid and coordinated action can be taken.	is taken in the case of alert / emergency	rapid and coordinated action can be taken in the case of alert / emergency	
f	To what extent the DRR system ensure integration of early warning systems integrated into policy and decision making processes and emergency systems at a national and local level?	No integration of early warning into policy and decision making and emergency management systems.	Ad-hoc integration of early warning into policy and decision making and emergency management systems.	Institutional review of early warning system and plan to fully integrate early warning into policy and decision making and emergency management with performance standards.	Early warning system 75% integrated into policy and decision making and emergency management systems are regularly tested against performance standards	Early warning system 100% integrated into policy and decision making and emergency management systems are regularly tested against performance standards	
g	To what extent are early warning systems coordinated with relevant sectors and actors in the early warning chain of the DRR system?	No early warning systems coordination and cooperation with relevant sectors and actors	Ad-Hoc early warning systems coordination and cooperation with relevant sectors and actors	All relevant sectors and actors in the early warning chain engaged and plan to strengthen early warning system approved	Effective early warning system with the cooperation and coordination of 75% relevant sectors and actors.	Effective early warning system with the cooperation and coordination of 100% relevant sectors and actors.	
HFA2 Key activity (iii) Capacity							
i	To what extent in the DRR system are the infrastructure and scientific, technological, technical and institutional capacities in place to	No capacities to research, observe, map, forecast for hazards, vulnerabilities and disaster impacts	Ad-hoc capacities to research, observe, map, forecast for hazards, vulnerabilities and	Capacities assessed for mapping forecasting hazards, vulnerabilities and impacts and capacity response	Capacities strengthened to research, observe, map, forecast for hazards, vulnerabilities and disaster impacts in	Capacities strengthened to research, observe, map, forecast for hazards, vulnerabilities and disaster impacts in	

	research, observe analyze, map and forecast natural hazards, vulnerabilities and disaster impacts.		disaster impacts	approved.	75% key organizations.	100% key organizations.	
j	To what extent is there an open exchange and dissemination of data for assessment, monitoring and early warning purposes at international, regional, national and local levels in the DRR system?	No access and use of databases for exchange and dissemination of data for assessment, monitoring and early warning purposes	Ad-hoc access and use of databases for exchange and dissemination of data for assessment, monitoring and early warning purposes	Databases are designed and piloted for open exchange and dissemination of data for assessment, monitoring and early warning purposes.	Relevant databases allow for assessment, monitoring and early warning and are accessible to international, regional, national and local levels.	Relevant databases allow for assessment, monitoring and early warning and are accessible to international, regional, national and local levels.	
k	To what extent is the improvement of scientific and technical methods for risk assessment, monitoring and early warning strengthened through research partnerships, training and technical capacity development in the DRR system?	No utilization of scientific and technical capacities for risk assessment, monitoring and early warning	Ad-hoc utilization of scientific and technical capacities for risk assessment, monitoring and early warning.	Capacity assessment for risk assessment, monitoring and early warning identify prioritized goals for capacity development.	50% capacity goals achieved to utilize scientific and technical capacities for risk assessment, monitoring and early warning.	100% capacity goals achieved to utilize scientific and technical capacities for risk assessment, monitoring and early warning.	
l	To what extent is there capacity to manage statistical information and data on hazards mapping, disaster risks, impacts and losses in the DRR system?	No system to manage statistical information and data on hazards mapping, disaster risks, impacts and losses.	Ad-hoc system to manage statistical information and data on hazards mapping, disaster risks, impacts and losses	System designed to manage statistical information and data on hazards mapping, disaster risks, impacts and losses.	System fully established and accessible by 50% of users, to manage statistical information and data on hazards mapping, disaster	System fully established and accessible by 100% of users, to manage statistical information and data on hazards mapping, disaster risks,	

					risks, impacts and losses.	impacts and losses.	
HFA2 Key activity (iv) Regional and emerging risks							
m	To what extent is statistical information and data on regional disaster risks impacts and loses compiled and standardized in the DRR system?	No system for statistical information and data on regional disaster risks impacts and loses	Ad-hoc system for statistical information and data on regional disaster risks impacts and loses	System designed and piloted for standardized and compiled statistical information and data on regional disaster risks impacts and loses	System fully established and accessible by 50% of users for standardized and compiled statistical information and data on regional disaster risks impacts and loses	System fully established and accessible by 100% of users for standardized and compiled statistical information and data on regional disaster risks impacts and loses	
n	To what extent is there regional and international cooperation to assess and monitor regional and trans-boundary hazards, exchange information and provide early warnings. (e.g. river basins)	No regional and international cooperation to assess and monitor regional and trans-boundary hazards, exchange information and provide early warnings.	Ad-hoc regional and international cooperation to assess and monitor regional and trans-boundary hazards, exchange information and provide early warnings.	System designed and piloted for regional and international cooperation to assess and monitor regional and trans-boundary hazards, exchange information and provide early warnings.	System fully established and accessible by 50% of users for regional and international cooperation to assess and monitor regional and trans-boundary hazards, exchange information and provide early warnings	System fully established and accessible by 100% of users for regional and international cooperation to assess and monitor regional and trans-boundary hazards, exchange information and provide early warnings.	
o	To what extent are there capacities to conduct research, analyze and report on long term changes and emerging	No systems for research, and reporting on changes and emerging issues that	Ad-hoc systems for research, and reporting on changes and emerging issues	System designed and piloted for research, and reporting on changes and	System fully established and accessible by 50% of users for research, and	System fully established and accessible by 100% of users for research, and reporting on	

	issues that might increase vulnerabilities and risks or the capacity of authorities and communities to respond to disasters in the DRR system?	might increase vulnerabilities and risks or capacities.	that might increase vulnerabilities and risks or capacities.	emerging issues that might increase vulnerabilities and risks or capacities.	reporting on changes and emerging issues that might increase vulnerabilities and risks or capacities.	changes and emerging issues that might increase vulnerabilities and risks or capacities.	
C Knowledge management and education **HFA Action 3. Use Knowledge, innovation and education to build a culture of safety and resilience at all levels**							
	Capacity Indicators	**Baseline: Level of Existing Capacity**					**Target: Level of Desired Capacity.** **Importance of Capacity**
		1	2	3	4	5	
HFA 3 Key activity (i) Information management and exchange							
a	To what extent is understandable information on disaster risks and protection options provided to encourage and enable people to take action to reduce risks and build resilience, especially citizens in high risk areas.	No information on disaster risks and protection options is available to people to take action to reduce risks and build resilience	Ad-hoc information on disaster risks and protection options is available to people to take action to reduce risks and build resilience	Design and pilot understandable information on disaster risks and protection options that incorporates relevant traditional and indigenous knowledge and cultural heritage.	Understandable and relevant information on disaster risks and protection options enables people to take action to reduce risks and build resilience in 75% of high risk areas.	Understandable and relevant information on disaster risks and protection options enables people to take action to reduce risks and build resilience in 100% of high risk areas.	

b	To what extent are disaster expert networks across sectors and between regions available when agencies and other actors develop local risk reduction plans.	No networks of disaster experts, managers and planners for developing local risk reduction plans.	Ad-hoc networks of disaster experts, managers and planners for developing local risk reduction plans.	Procedures designed and piloted to strengthen networks of disaster experts, managers and planners for developing local risk reduction plans.	Strengthened networks across sectors and between regions ensure expertise available to priority agencies and actors when developing 75% of local risk reduction plans.	Strengthened networks across sectors and between regions ensure expertise available to priority agencies and actors when developing 100% of local risk reduction plans.	
c	To what extent is there dialogue and cooperation between scientific communities and practitioners working on DRR, including those working on socioeconomic dimensions of DRR?	No cooperation among DRR scientists, practitioners and stakeholders.	Ad-hoc cooperation among DRR scientists, practitioners and stakeholders.	Mechanisms to encourage partnerships among scientists, practitioners and stakeholders working on DRR designed and piloted.	Improving dialogue and cooperation among DRR scientists, practitioners and stakeholders	Effective dialogue and cooperation among DRR scientists, practitioners and stakeholders	
d	To what extent is recent information, communication and space-based technologies and earth observations used to support DRR?	No application of information, communication and technologies to support DRR	Ad-hoc application of information, communication and technologies to support DRR	Mechanisms to promote the use and application of information, communication and technologies developed for training and dissemination of information among different users.	Increasing categories of users are able to fully apply information, communication and technologies to support DRR	All categories of users are able to fully apply information, communication and technologies to support DRR	
e	To what extent are directories, inventories and national	No exchange of information on good practices, disaster	Ad-hoc exchange of information on good practices,	Local, national, regional and international	Exchange of information on good practices,	Exchange of information on good practices, disaster	

	information sharing systems and services for exchange of information on good practices, disaster risk technologies and lessons learned	risk technologies and lessons learned	disaster risk technologies and lessons learned	directories, inventories and user friendly information systems are developed.	disaster risk technologies and lessons learned on policies plans and measures for DRR are available through local, national, directories.	risk technologies and lessons learned on policies plans and measures for DRR are available through local, national, regional and international directories.	
f	How well do institutes dealing with urban development provide information on disaster reduction options?	No provision of information on disaster reduction options prior to construction, land purchase and sale.	Ad-hoc provision of information on disaster reduction options prior to construction, land purchase and sale.	Institutions develop information on disaster reduction options prior to construction, land purchase and sale.	75% of the public are provided with information on disaster reduction options prior to construction, land purchase and sale.	100% of the public are provided with information on disaster reduction options prior to construction, land purchase and sale.	
g	How well is international standard terminology related to DRR updated and widely disseminated?	No DRR terminology used in program and institutional development, operations, research, training and public information.	Ad-hoc DRR terminology used in program and institutional development, operations, research, training and public information.	Develop DRR International terminology for use in program and institutional development, operations, research, training and public information.	DRR International terminology for used in 50% of program and institutional development, operations, research, training and public information.	DRR International terminology for used in100% of program and institutional development, operations, research, training and public information.	
HFA 3 Key activity (ii) Education and Training							
h	How well is DRR knowledge included into relevant sections of the school curricula and	No DRR knowledge is included into some sections of the school curricula and	Ad-hoc DRR knowledge is included into some sections of the	DRR knowledge is included into relevant sections of the school curricula.	50% of schools use curricula including DRR knowledge.	100% of schools use curricula including DRR knowledge.	

	formal and informal channels used to reach youth and children?	youth programs.	school curricula and youth programs.	Youth program designed with formal and informal channels for DRR knowledge.	Youth program reaches 50% youth and children	Youth program reaches 100% youth and children	
i	To what extent are local risk reduction and disaster preparedness programs promoted and implemented in schools and higher education?	No local risk reduction and disaster preparedness programs in schools and higher education institutions.	Ad-hoc local risk reduction and disaster preparedness programs in schools and higher education institutions.	Local risk reduction and disaster preparedness programs are developed for schools and higher education institutions.	Local risk reduction and disaster preparedness programs are implemented in 50% of schools and higher education institutions.	Local risk reduction and disaster preparedness programs are implemented in 100% of schools and higher education institutions.	
j	To what extent are programs and activities for learning how to minimize the effect of hazards promoted and implemented in schools?	No programs and activities for learning how to minimize the effect of hazards are implemented in schools	Ad-hoc programs and activities for learning how to minimize the effect of hazards are implemented in schools	Programs and activities for learning how to minimize the effect of hazards are developed for schools	Programs and activities for learning how to minimize the effect of hazards are implemented in 50% of schools.	Programs and activities for learning how to minimize the effect of hazards are implemented in 100% of schools	
k	To what extent are training and learning programs in DRR targeted at specific sectors?	No DRR training and learning programs	Ad-hoc DRR training and learning programs	DRR Capacity assessment conducted for development planners, emergency managers, local government officials	DRR Capacity response delivered for 50% of development planners, emergency managers and local government officials	DRR Capacity response delivered for 100% of development planners, emergency managers and local government officials	
l	To what extent are there community-based training initiatives,	No community-based training initiatives to	Ad-hoc community-based training initiatives	Capacity assessment of communities and volunteer groups	Capacity responses delivered for 50% of communities and	Capacity responses delivered for 100% of communities and	

	considering the role of volunteers, to enhance local capacities to mitigate and cope with disasters	enhance local capacities to mitigate and cope with disasters	to enhance local capacities to mitigate and cope with disasters	conducted to identify local capacities to mitigate and cope with disasters.	volunteer groups enhance local capacities to mitigate and cope with disasters.	volunteer groups enhance local capacities to mitigate and cope with disasters.	
m	To what extent is there equal access and opportunities for DRR training and education for women and vulnerable constituencies?	No access and opportunities for DRR training and education women and vulnerable constituencies	Ad-hoc equal access and opportunities for DRR training and education women and vulnerable constituencies	DRR training and education is developed to promote gender and cultural sensitivity.	75% of women and vulnerable constituencies have equal access and opportunities for DRR training and education	100% of women and vulnerable constituencies have equal access and opportunities for DRR training and education.	
HFA 3. Key activity (iii) Research							
n	To what extent are methods for predictive multi-risk assessments and socioeconomic cost benefit analysis of risk reduction at all levels incorporated into decision making processes?	No use of methods for predictive multi-risk assessments and socioeconomic cost benefit analysis of risk reduction	Ad hoc use of methods for predictive multi-risk assessments and socioeconomic cost benefit analysis of risk reduction	Develop and improve methods for predictive multi-risk assessments and socioeconomic cost benefit analysis of risk reduction at all levels	Decision making at national and local levels utilize predictive multi-risk assessments and socioeconomic cost benefit analysis of risk reduction	Decision making at regional, national and local levels utilize predictive multi-risk assessments and socioeconomic cost benefit analysis of risk reduction	
o	To what extent are technical and scientific capacities being strengthened to develop and apply methodologies studies and models to assess vulnerabilities to and impact of geographical,	No scientific and technical capacities in vulnerabilities to and impact of geographical, weather, water and climate related hazards	Ad-hoc scientific and technical capacities in vulnerabilities to and impact of geographical, weather, water and climate related	Technical and Scientific Capacity Assessment and responses to develop and apply methodologies studies and models to assess vulnerabilities and	Scientific and technical capacities strengthened in vulnerabilities to and impact of geographical, weather, water and climate related	Scientific and technical capacities strengthened in vulnerabilities to and impact of geographical, weather, water and climate related hazards, including	

	weather, water and climate related hazards.		hazards	impact to recognized standards.	hazards	the improvement of regional monitoring capacities and assessments.	
HFA 3 Key activity (iv) Public Awareness							
p	How well is the media engaged in order to stimulate a culture of disaster resilience and strong community involvement in public education campaigns and public consultations?	No media support to public education campaigns and public consultations	Ad-hoc media support to public education campaigns and public consultations	Comprehensive media engagement strategy to stimulate a culture of disaster resilience and strong community involvement.	Public education campaigns and public consultations at all levels of society are supported by all members of the media at a national level.	Public education campaigns and public consultations at all levels of society are supported by all members of the media at a local and national level.	
D. Reduce underlying risk factors **HFA Action 4. Reduce Underlying Risk Factors**							
	Capacity Indicators	**Baseline: Level of Existing Capacity**					**Target: Level of Desired Capacity.** **Importance of Capacity**
		1	2	3	4	5	
19	To what extent sector development and post-disaster planning and programming enable integration of DRR.	Risk reduction is not integrated into development planning mechanisms and	Attempts made to incorporate DRR into plans, but lack of guidelines, supporting analysis	Pilot /irregular attempts made to incorporate DRR into plans and establish guidelines, strengthen analysis	DRR is regularly incorporated into development plans; mechanisms to ensure implementation	100% integration of risk reduction into development frameworks and sector development plans; mechanism to	

		practices	and skills	and develop skills. But implementation is still weak	being strengthened; but still limited coverage of sectors/regions	ensure implementation applied;	
HFA 4 Key Activity (i) Environmental and Natural Resource Management							
a	To what extent land-use planning and development activities encourage sustainable use and management of ecosystems.	Land-use planning and development activities do not encourage sustainable use and management of ecosystems.	Ad-hoc effort to promote sustainable use of ecosystems in land-use planning and development activities.	Policies and legislation developed and introduced for sustainable use of ecosystems in land-use planning and development activities.	Policies and methods for sustainable use of ecosystems are applied in 50% of cases in land-use planning and development activities.	Land –use planning and development activities consistently (100%) reduce risk and vulnerabilities and ensure sustainable use and management of ecosystems.	
b	To what extent are risk reduction issues considered into environmental and natural resource management approaches	No risk reduction consideration in environmental and natural resource management approaches	Ad hoc attempts made to consider risk reduction in these approaches but lack of guidelines, capacity to analyze and skills to apply.	Pilot /irregular initiatives to incorporate risk reduction in these approaches, with developed guidelines, capacity to analyze and skills, but implementation still weak.	Risk reduction measures are regularly integrated into environmental/natural resource management approaches; mechanism for the implementation applied in 50% of cases.	Risk reduction measures integrated into environmental/natural resource management approaches and consistently applied.	
c	To what extent strategies for adaptation to climate change integrate risk reduction associated with existing climate variability and	No strategies for adaptation to climate change integrate risk reduction associated with existing	Strategies for adaptation to climate change, integrating risk reduction measures are defined and	Policies and procedures for adaptation of risk reduction in measures addressing climate change are	Risk reduction approach is applied in 50% of activities addressing climate change.	Strategies for adaptation to climate change integrating risk reduction associated with existing climate	

	future climate change.	climate variability and future climate change	communicated to major stakeholders and decision-makers	adopted.		variability and future climate change are consistently applied	
HFA 4 Key activity (ii) Social and economic development practices							
d	To what extent DRR system promotes food security in ensuring the resilience of communities to hazards.	No food security for communities prone to natural hazards affecting their livelihood.	Needs/feasibility assessments conducted and strategies identified to ensure food security for vulnerable communities and households.	Food Security Action Plan developed is adopted by national and local decision-makers and put in use in pilot communities. Action plan encourages participation and mobilization of local communities.	Food security measures are reflected in national and local budgets. Pilot programs are extended in 50% of high-risk communities.	Food security is ensured for all high-risks communities to increase their resilience to hazards, especially in areas prone to drought, flood, and other disasters affecting agriculture-based livelihoods.	
e	To what extent health sector planning and programming integrate DRR measures.	No consideration of DRR in the health sector planning.	Awareness on importance of DRR is increased among health sector planners and decision-makers	Strategies for integration of DRR in health sector planning are identified and adopted.	DRR measures are integrated in 50% of health sector planning and programming activities.	DRR measures are fully integrated in health sector planning and consistently applied.	
f	To what extent critical public facilities and physical infrastructure are adequately resilient to hazards	No consideration of potential impact of disasters on critical public facilities and infrastructures.	Increased awareness of importance of protection and strengthening critical public facilities and infrastructures is	Strategies and approaches to protect and strengthen critical facilities are developed at national, regional and community	Measures to protect and strengthen critical public facilities and infrastructure are applied in 50% of communities.	Critical public facilities and infrastructure are adequately strengthened and protected to remain functional in case of disasters in all	

			case of disasters.	levels.		communities.	
g	To what extent social safety-nets and recovery schemes are developed and managed to assist most vulnerable (poor, disabled, elders, etc.) and general population affected by disasters.	No assistance and recovery mechanisms in place to help disaster affected people.	Awareness of importance of social safety-nets and recovery mechanisms for communities at risk (disaster prone areas) is increased with general population, local leaders and national government.	Policies and programs developed to create and strengthen local social safety-nets and recovery mechanism for communities at risk.	Social safety nets and recovery mechanisms are developed for 50% of communities at risk.	Social safety nets and recovery mechanism are developed and ready to assist disaster affected population in all communities throughout the country, with a particular attention to the most vulnerable people.	
h	To what extent DRR system incorporates disaster risk reduction measures into post-disaster recovery and rehabilitation processes.	No DRR consideration in post-disaster recovery and rehabilitation process.	Awareness on importance of DRR measures in post-disaster processes increased with local communities, and government officials.	Policies and strategies are developed and integrated in the local and national planning for inclusion of DRR measures in the post-disaster activities.	DRR measures are applied in post-disaster planning and programming in 50% of cases.	DRR system ensures risk reduction measures in post-disaster recovery and rehabilitation process for all cases.	
i	To what extent DRR system ensures that programs for displaced persons do not increase risk and vulnerability to hazards	No guarantee for security and vulnerability to hazard for displaced people provided.	DRR stakeholders increased their awareness on necessity to ensure security and safety for displaced people and avoid creation of new risks.	DRR system increases its capacity to ensure safe and secure displacement of disaster affected people in 30% of cases	DRR system increases its capacity to ensure safe and secure displacement of disaster affected people in 50% of cases	DRR system has a full capacity to ensure security and avoid creation of risks for displaced people in all case of disasters.	

j	To what extent diversification of income options of population in high-risk areas are promoted and their income and assets are protected.	Lack of diversification of income and protection of assets for communities and households in high-risk areas	Awareness increased among population and decision-makers on importance for income diversification and protection of assets in high-risk areas	20 % of communities and households at risk have diversified their income options and abilities to protect their assets in case of disasters.	50% of communities and households at risk have diversified their income options and abilities to protect their assets in case of disasters.	100% of communities and households at risk have diversified their income options and protect their income and assets in case of disasters.	
k	To what extent financial risk-sharing mechanisms are in place, particularly insurance and reinsurance against disasters.	No financial risk-sharing mechanisms in place.	Policies and legislation are improved to promote creation and development of financial risk-sharing mechanisms, including insurance and reinsurance against disasters	Financial risk-sharing mechanism, including insurance and reinsurance against disasters are available to 20% of communities.	Financial risk-sharing mechanism, including insurance and reinsurance against disasters are available to 50% of communities.	Financial risk-sharing mechanism, including insurance and reinsurance against disasters are available to 100% of communities.	
l	To what extent public-private partnership encourages engagement of private sector in disaster risk reduction activities.	No participation of private sector in DRR activities.	Policies and procedures developed to create incentives for private sector to engage in DRR efforts	Public-private partnership activities are incorporated in DRR planning and programming	Public-private partnership successfully piloted in some regions and communities at risk.	Private sector actors are fully engaged in disaster risk reduction activities, allocating sufficient resources to disaster risk prevention activities.	
HFA 4 key Activity Land-use planning and other technical measures							
n	To what extent is risk assessment carried out and considered in the urban planning and	No risk assessment carried out and no consideration in	Ad hoc risk assessments carried out though no standard	Unified policies and procedures for disaster risk assessments in	Unified methodology for risk assessment is being applied in	Risk assessments carried out regularly on national and local levels, produced	

	management of disaster-prone human settlements	urban planning	methodologies used; assessment information not used in urban planning	urban planning and development are adopted and piloted.	majority of cases; mechanisms for monitoring of the processes are piloted; information used for future urban and rural planning.	information fully utilized in urban and disaster-prone settlements' planning; mechanism for monitoring of the processes developed and fully applied	
o	To what extent DRR measures are considered in planning procedures for major infrastructure projects.	No DRR consideration in planning and implementation of major infrastructure projects.	DRR assessment is an important element for feasibility studies for major projects along with social, economic and environmental analysis. DRR criteria are included in the review and approval process.	DRR criteria and requirements are considered in the planning for all new major infrastructure projects	DRR indicators are included and followed by during the monitoring and supervision of major infrastructure projects' implementation.	DRR measures are strictly followed during the planning and execution of major infrastructure projects	
p	To what extent DRR guidelines and monitoring tools are used in land-use policy and planning.	No DRR considerations in land use policies and planning.	DRR guidelines and monitoring tools are developed and introduced in land use planning and policies.	Incentives created for all stakeholders to follow DRR requirements in land use planning and programs	DRR Monitoring and evaluation system successfully applied to follow implementation of guidelines in land-use practices.	Implementation of land use policies and programs strictly follow DRR requirements in all cases.	
q	To what extent DRR assessment is incorporated in the rural development planning and management.	No consideration of DRR requirements in rural development planning and	DRR approaches and methods are introduced and adopted for rural development	DRR methods are applied in pilot programs of rural development (20% of cases)	DRR methods are applied in majority of rural development programs (60% of	Rural development planning and management are consistent with DRR requirements in all	

		management	planning and management.		cases)	cases	
r	At what extent current practices and policies support revision, updating and application of building codes, standards, rehabilitation and reconstruction practices on national and local levels.	Building codes and standards outdated, construction standards not applied	Building codes developed but not regularly updated/approved, standards only partially applied; no mechanism for monitoring of the related processes;	Building codes developed, updated though application of standards is rather sporadic; mechanism for monitoring of related processes being developed but implementation very weak	Building codes revised / updated; application of standards is more regular though still with some limitations; mechanism for monitoring for related processes developed/approved but limitations in implementation	Building codes revised and updated regularly; standards applied in construction practices and strong monitoring mechanism is implemented for all cases.	
E. Preparedness for effective response and recovery **HFA Action 5: Strengthen disaster preparedness for effective response at all levels**							
	Capacity Indicators	**Baseline: Level of Existing Capacity**					**Target: Level of Desired Capacity.** **Importance of Capacity**
		1	2	3	4	5	
HFA 5 Key activities:							
a	To what extent are there policies to strengthen	No policies and legislation for	Policies and regulations to some	New policies and legislation for	Policies and legislation	Policies and legislation promoting	

	disaster management capacities at regional, national and local levels?	disaster management capacity development	extent support strengthening disaster management at national and local levels	disaster management drafter and introduced at national and local levels	strengthening capacities for effective disaster management at all levels are adopted	disaster management are effectively implemented at all levels (regional, national and local)	
a	To what extent are there technical and organizational capacities to manage disasters at regional (Caucasus), national and local levels?	No technical and organizational capacities for disaster management	Technical and organizational capacities are somewhat developed to manage emergency situations national and local levels	DRR institutions implement effective capacity development strategies to manage disasters at all levels	Technical and organizational capacities are well developed for effective disaster management at national and local levels, established cooperation at regional level.	Technical and organizational capacities are fully developed for effective disaster management at all levels (regional, national and local)	
b	To what extent existing policies and DRR system support dialogue, exchange of information and coordination between DRR organizations	No ongoing dialogue, information exchange and coordination among DRR institutions in the country	DRR policies promote and support dialogue, and information exchange among DRR institutions	Policies and procedures are well established for supporting and promoting dialogue and cooperation among DRR institutions	Effective dialogue, information exchange and cooperation are established among different DRR institutions and entities.	Ongoing effective dialogue, exchange of information and coordination among DRR institutions fosters holistic approach towards DRR	
c	To what extent current DRR system is ready to effectively cooperate with regional and international partners for coordinated response in situations of exceeding national coping	No regional policies, approaches and mechanisms to prepare and ensure rapid and effective disaster response in situations exceeding national	There is an established communication with regional and international DRR partners on developing cooperation for coordinated	DRR institutions develop and strengthen capacities for effective cooperation with regional and international partners in DRR	Joint planning and practical exercises successfully implemented with regional and international partners to strengthen capacities for	There are well established regional policies, approaches, operational mechanisms and plans to prepare and ensure rapid and effective disaster response in situations	

	capacities	coping capacities.	response in case of emergencies		effective joint response in emergencies	exceeding national coping capacities.	
d	To what extent current DRR policies and practices ensure updating and testing disaster preparedness and contingency plans at all levels	No policies and procedures for reviewing, updating and testing disaster preparedness and contingency plans.	DRR policies are developed to ensure updating and testing disaster preparedness and contingency plans at different levels	Policies and plans are tested in pilot areas to ensure regular updating of disaster preparedness and contingency plans at national and local levels. Disaster preparedness exercises, including evacuation drills are conducted in pilot areas.	Regular disaster preparedness exercises, including evacuation drills, with a view to ensuring rapid and effective disaster response and access to essential food and non-food relief supplies, are conducted in all regions of the country	Disaster preparedness and contingency plans and policies are periodically reviewed, updated and tested at all levels, with a particular focus on the most vulnerable areas and groups. Regular exercises and practical measures are applied in all regions.	
e	To what extent current DRR legislation and practice promote development of emergency funds to support response, recovery and preparedness measures	No emergency funds to support preparedness, response and recovery measures	Policies and procedures are established to develop and maintain emergency funds	There are system, transparent and efficient procedures and necessary capacities developed to effectively manage development and use of emergency funds	Sufficient support and funding allocations ensure effective development and management of emergency funds	Emergency funds to support response, recovery and preparedness measures are established, periodically replenished and effectively managed	
f	To what extent are there mechanisms for ensuring active participation and ownership of relevant stakeholders, including	No participation and ownership of stakeholders in DRR processes	There are policies and procedures established to promote participation of	Active participation and local ownership promoted by DRR institutions throughout the	Local capacities developed for active participation and stakeholder ownership,	There is an active participation and ownership of DRR of all relevant stakeholders and	

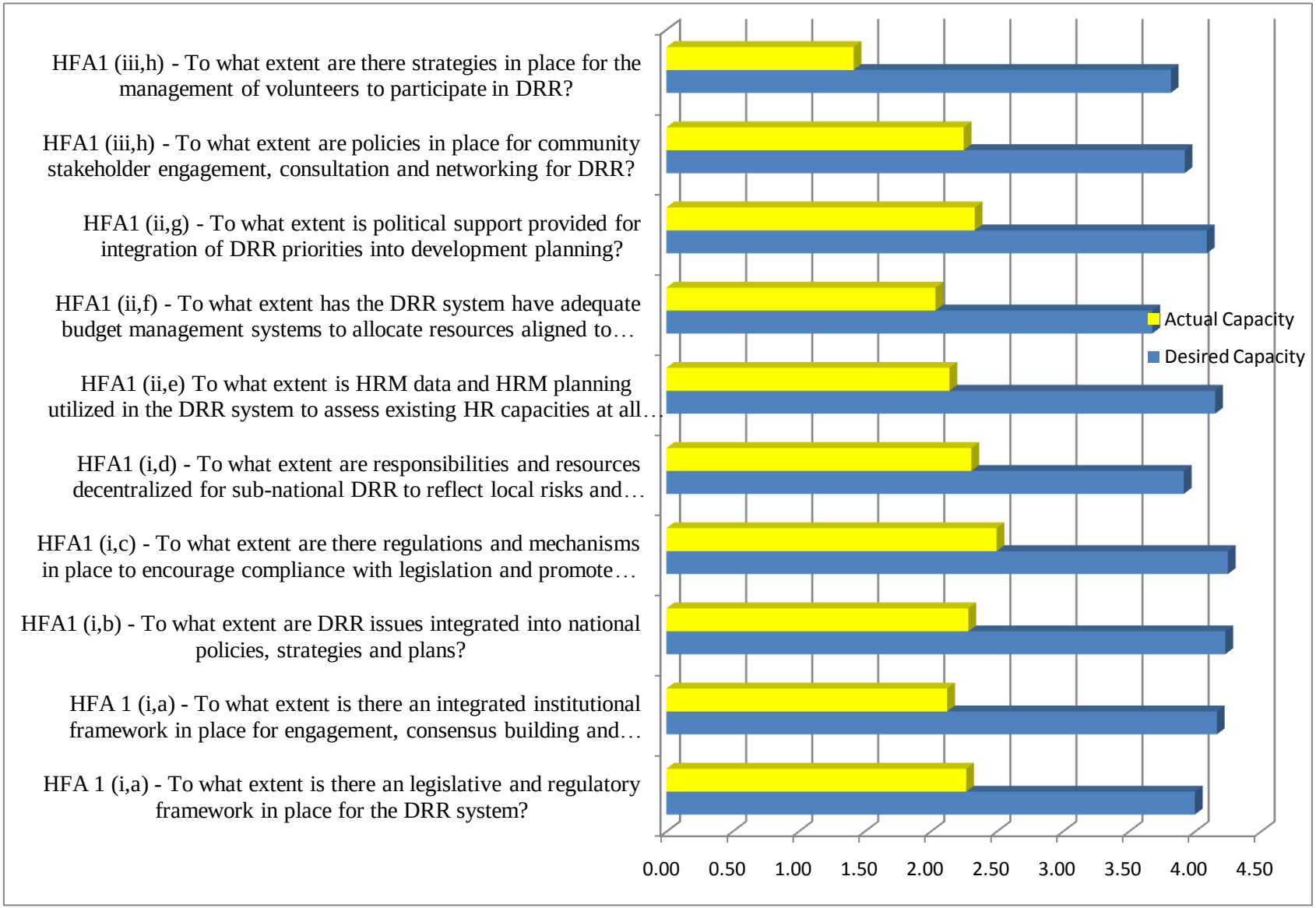
	communities, in DRR.		local communities and stakeholder in DRR processes	system and processes	including adequate allocation of resources and promotion of volunteerism	local communities in disaster risk reduction, built on the spirit of volunteerism.	

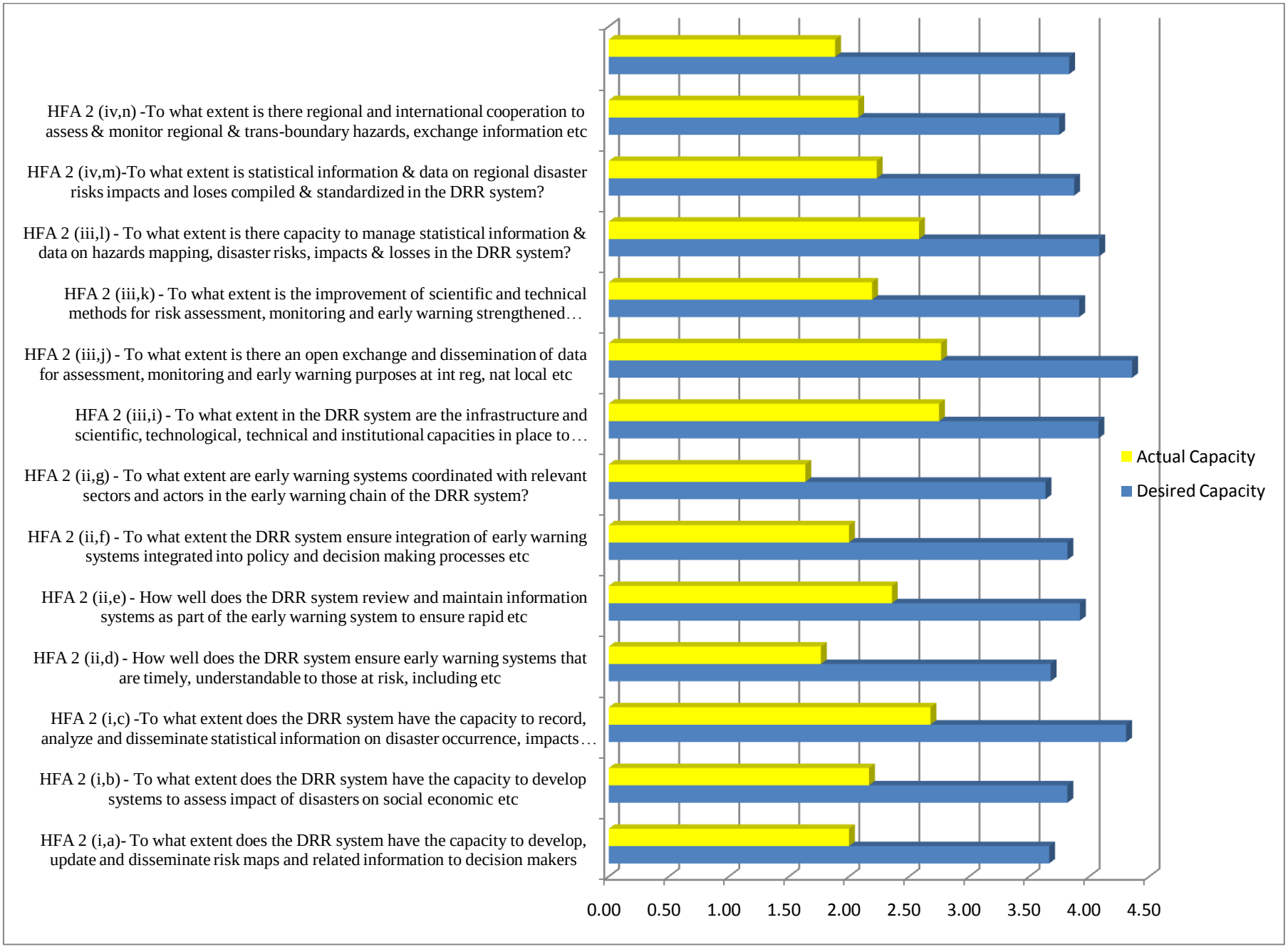
Background: Respondent Characteristics

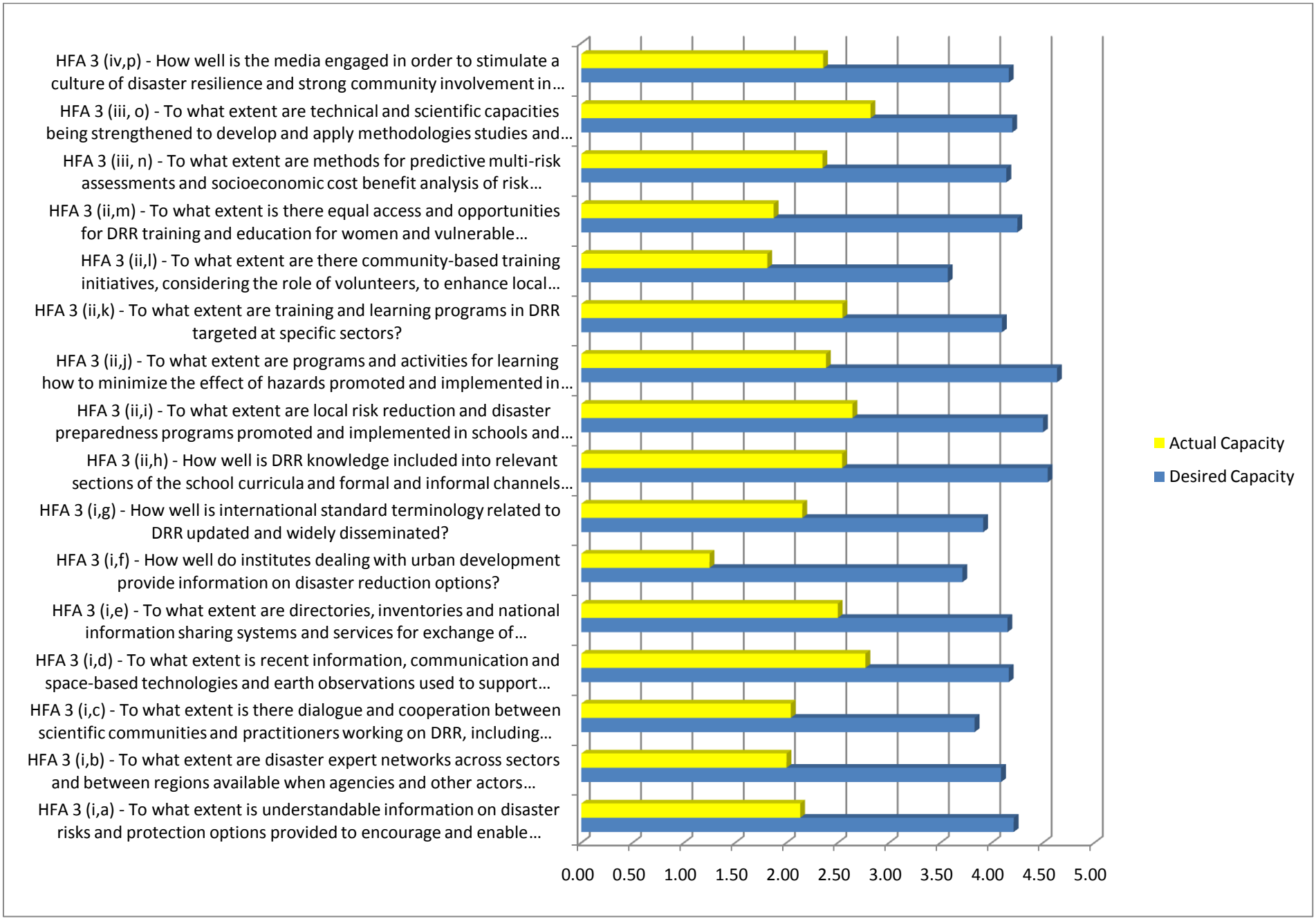
Respondent Characteristics	
Name of Employer	
Name (optional)	
Administration Level	
Department / Unit	
National or Local level	
Job Title (optional)	
Years in Position	
# of Staff Managed	
Gender	
Age	
Highest level of Education	

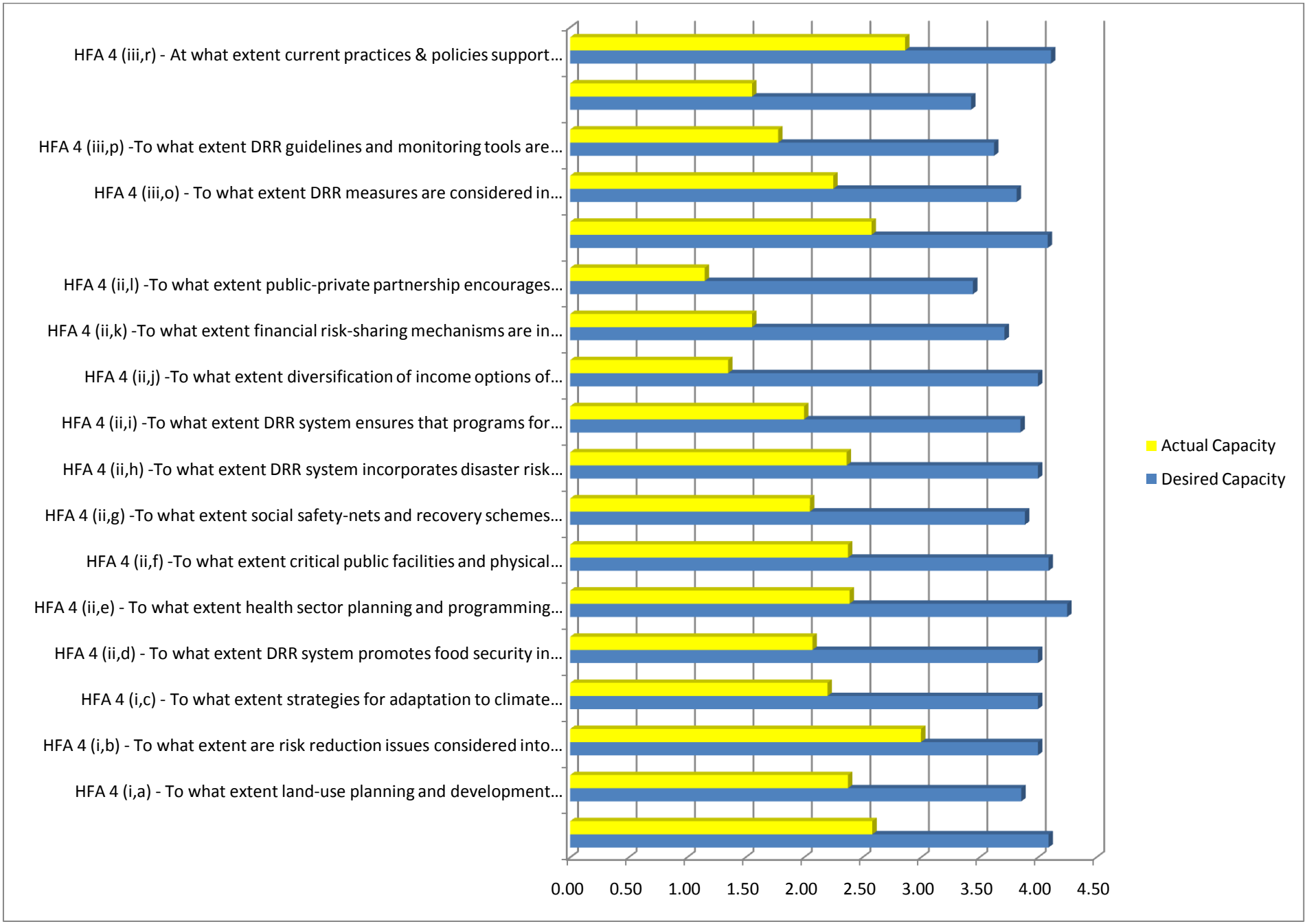
THANK YOU FOR YOUR SUPPORT

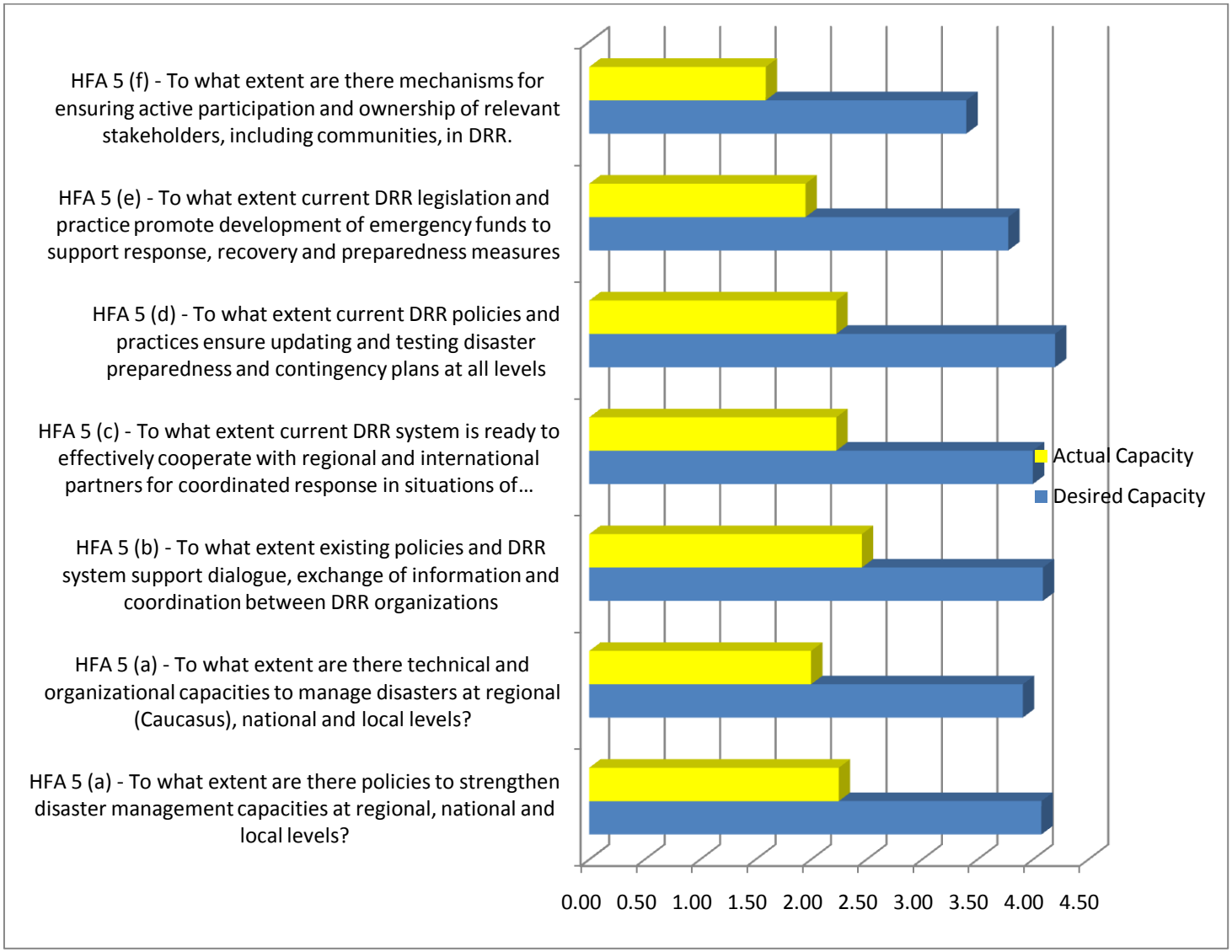
Annex 6: DRR HFA 1-5 Actual and Desired Capacity

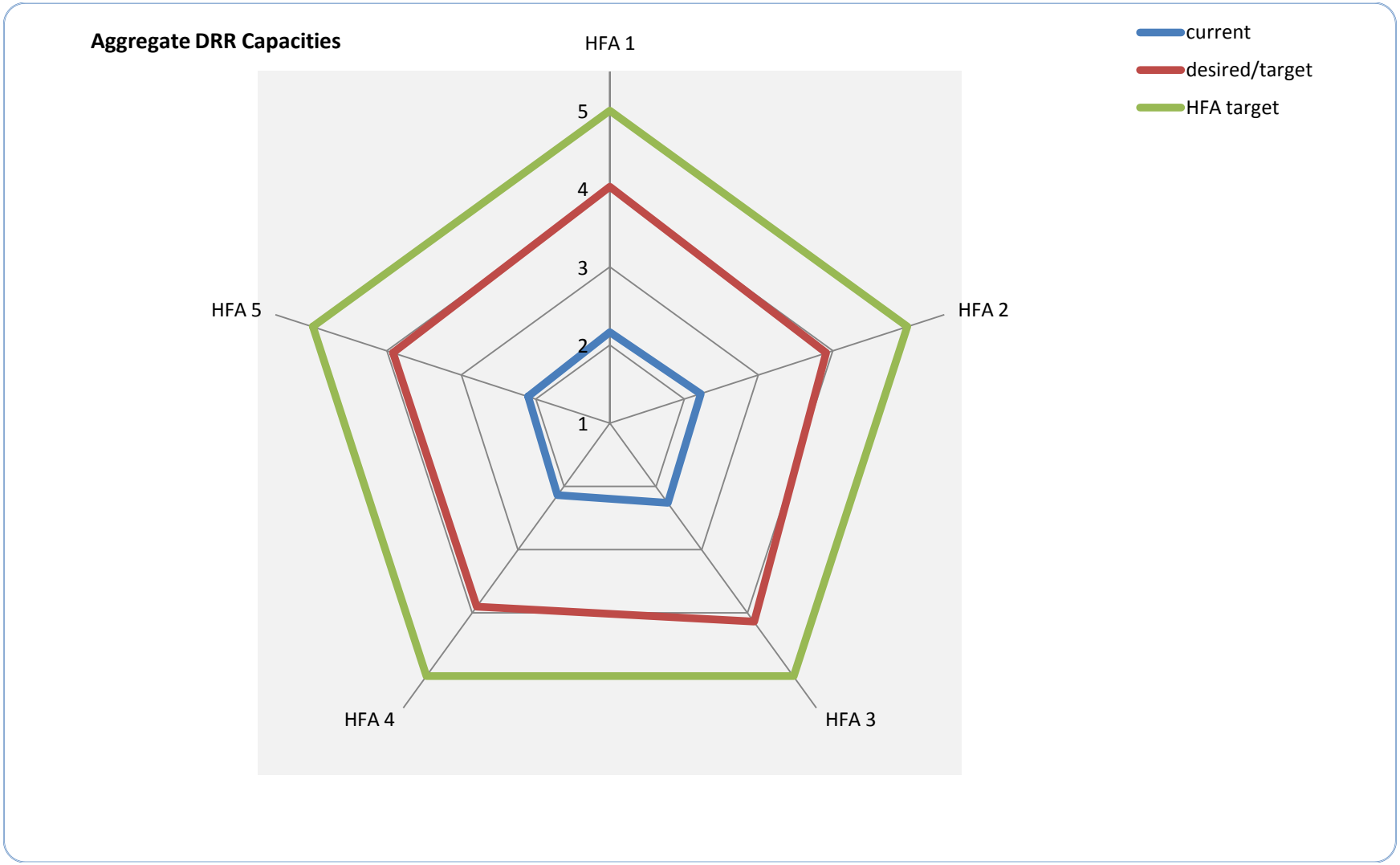



HFA 2 (iv,n) -To what extent is there regional and international cooperation to assess & monitor regional & trans-boundary hazards, exchange information etc
HFA 2 (iv,m)-To what extent is statistical information & data on regional disaster risks impacts and loses compiled & standardized in the DRR system?
HFA 2 (iii,l) - To what extent is there capacity to manage statistical information & data on hazards mapping, disaster risks, impacts & losses in the DRR system?
HFA 2 (iii,k) - To what extent is the improvement of scientific and technical methods for risk assessment, monitoring and early warning strengthened…
HFA 2 (iii,j) - To what extent is there an open exchange and dissemination of data for assessment, monitoring and early warning purposes at int reg, nat local etc
HFA 2 (iii,i) - To what extent in the DRR system are the infrastructure and scientific, technological, technical and institutional capacities in place to…
HFA 2 (ii,g) - To what extent are early warning systems coordinated with relevant sectors and actors in the early warning chain of the DRR system?
HFA 2 (ii,f) - To what extent the DRR system ensure integration of early warning systems integrated into policy and decision making processes etc
HFA 2 (ii,e) - How well does the DRR system review and maintain information systems as part of the early warning system to ensure rapid etc
HFA 2 (ii,d) - How well does the DRR system ensure early warning systems that are timely, understandable to those at risk, including etc
HFA 2 (i,c) -To what extent does the DRR system have the capacity to record, analyze and disseminate statistical information on disaster occurrence, impacts…
HFA 2 (i,b) - To what extent does the DRR system have the capacity to develop systems to assess impact of disasters on social economic etc
HFA 2 (i,a)- To what extent does the DRR system have the capacity to develop, update and disseminate risk maps and related information to decision makers
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
Actual Capacity
Desired Capacity

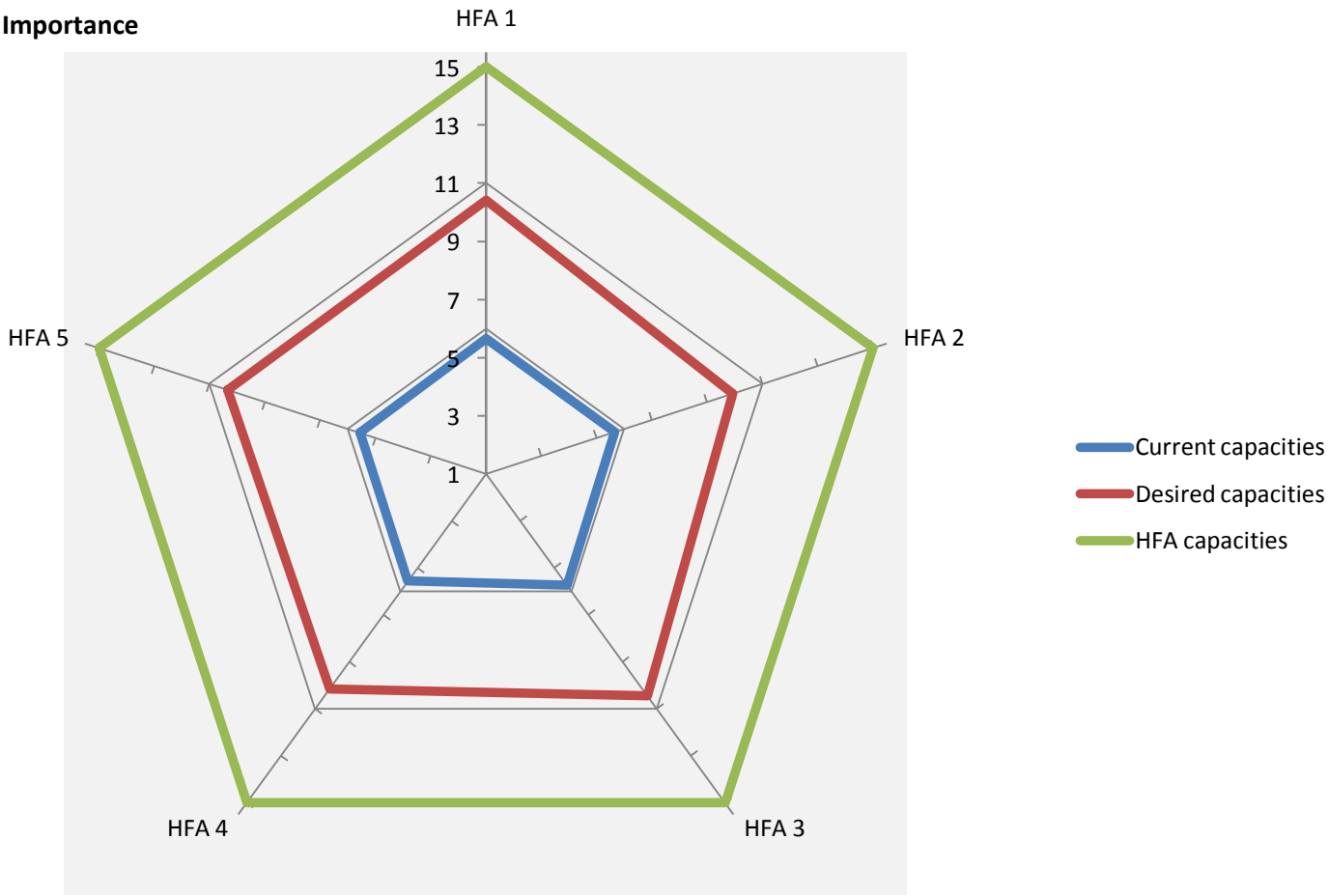

HFA 3 (iv,p) - How well is the media engaged in order to stimulate a culture of disaster resilience and strong community involvement in…
HFA 3 (iii, o) - To what extent are technical and scientific capacities being strengthened to develop and apply methodologies studies and…
HFA 3 (iii, n) - To what extent are methods for predictive multi-risk assessments and socioeconomic cost benefit analysis of risk…
HFA 3 (ii,m) - To what extent is there equal access and opportunities for DRR training and education for women and vulnerable…
HFA 3 (ii,l) - To what extent are there community-based training initiatives, considering the role of volunteers, to enhance local…
HFA 3 (ii,k) - To what extent are training and learning programs in DRR targeted at specific sectors?
HFA 3 (ii,j) - To what extent are programs and activities for learning how to minimize the effect of hazards promoted and implemented in…
HFA 3 (ii,i) - To what extent are local risk reduction and disaster preparedness programs promoted and implemented in schools and…
HFA 3 (ii,h) - How well is DRR knowledge included into relevant sections of the school curricula and formal and informal channels…
HFA 3 (i,g) - How well is international standard terminology related to DRR updated and widely disseminated?
HFA 3 (i,f) - How well do institutes dealing with urban development provide information on disaster reduction options?
HFA 3 (i,e) - To what extent are directories, inventories and national information sharing systems and services for exchange of…
HFA 3 (i,d) - To what extent is recent information, communication and space-based technologies and earth observations used to support…
HFA 3 (i,c) - To what extent is there dialogue and cooperation between scientific communities and practitioners working on DRR, including…
HFA 3 (i,b) - To what extent are disaster expert networks across sectors and between regions available when agencies and other actors…
HFA 3 (i,a) - To what extent is understandable information on disaster risks and protection options provided to encourage and enable…
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
5.00
Actual Capacity
Desired Capacity


HFA 4 (iii,r) - At what extent current practices & policies support...
HFA 4 (iii,p) -To what extent DRR guidelines and monitoring tools are...
HFA 4 (iii,o) - To what extent DRR measures are considered in...
HFA 4 (ii,l) -To what extent public-private partnership encourages...
HFA 4 (ii,k) -To what extent financial risk-sharing mechanisms are in...
HFA 4 (ii,j) -To what extent diversification of income options of...
HFA 4 (ii,i) -To what extent DRR system ensures that programs for...
HFA 4 (ii,h) -To what extent DRR system incorporates disaster risk...
HFA 4 (ii,g) -To what extent social safety-nets and recovery schemes...
HFA 4 (ii,f) -To what extent critical public facilities and physical...
HFA 4 (ii,e) - To what extent health sector planning and programming...
HFA 4 (ii,d) - To what extent DRR system promotes food security in...
HFA 4 (i,c) - To what extent strategies for adaptation to climate...
HFA 4 (i,b) - To what extent are risk reduction issues considered into...
HFA 4 (i,a) - To what extent land-use planning and development...
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
Actual Capacity
Desired Capacity


HFA 5 (f) - To what extent are there mechanisms for ensuring active participation and ownership of relevant stakeholders, including communities, in DRR.
HFA 5 (e) - To what extent current DRR legislation and practice promote development of emergency funds to support response, recovery and preparedness measures
HFA 5 (d) - To what extent current DRR policies and practices ensure updating and testing disaster preparedness and contingency plans at all levels
HFA 5 (c) - To what extent current DRR system is ready to effectively cooperate with regional and international partners for coordinated response in situations of…
HFA 5 (b) - To what extent existing policies and DRR system support dialogue, exchange of information and coordination between DRR organizations
HFA 5 (a) - To what extent are there technical and organizational capacities to manage disasters at regional (Caucasus), national and local levels?
HFA 5 (a) - To what extent are there policies to strengthen disaster management capacities at regional, national and local levels?
Actual Capacity
Desired Capacity
0.00 0.50 1.00 1.50 2.00 2.50 3.00 3.50 4.00 4.50


Aggregate DRR Capacities
HFA 1
HFA 2
HFA 3
HFA 4
HFA 5
5
4
3
2
1
current
desired/target
HFA target

Aggregate DRR Capacities x Importance



What is going well? (5 Lowest capacity gaps)

HFA	Description in English	Description in Armenian	Capacity gap
4.b.	To what extent are risk reduction issues considered into environmental and natural resource management approaches	Որքանո՞վ են հողի պլանավորումը և հողի պլանավորման գործողությունները բարենպաստ էկոհամակարգերի կայուն օգտագործման և կառավարման համար:	1.00
4.r.	At what extent current practices and policies support revision, updating and application of building codes, standards, rehabilitation and reconstruction practices on national and local levels.	Որքանո՞վ են ընթացիկ գործելակերպերը և քաղաքականություններն օժանդակում շինարարական օրենսգրքերի, չափորոշիչների, վերականգնման և վերակառուցման գործողությունների վերանայմանը, թարմացմանը և կիրառությանը ազգային և տեղական մակարդակներով:	1.25
2.i.	To what extent in the DRR system are the infrastructure and scientific, technological, technical and institutional capacities in place to research, observe analyze, map and forecast natural hazards, vulnerabilities and disaster impacts.	Աղետների ռիսկերի նվազեցման համակարգում որքանով են առկա գիտական, տեխնոլոգիական, տեխնիկական և ինստիտուցիոնալ կարողություններ իրականացնելու համար բնական վտանգների, խոցելիությունների և աղետների ազդեցությունների հետազոտություններ, վերլուծություններ, քարտեզագրումներ և կանխատեսումներ:	1.33
3.o.	To what extent are technical and scientific capacities being strengthened to develop and apply methodologies studies and models to assess vulnerabilities to and impact of geographical, weather, water and climate related hazards?	Աշխարհագրական, եղանակային, ջրային և կլիմայական վտանգների նկատմամբ խոցելիությունները և դրանց ազդեցությունը գնահատելու համար որքանո՞վ են ուժեղացվում մեթոդաբանություններ, ուսումնասիրություններ և մոդելներ կիրառելու գիտատեխնիկական կարողությունները:	1.38
3.d.	To what extent is recent information, communication and space-based technologies and earth observations used to support DRR?	Աղետների ռիսկերի նվազեցման նպատակով որքանո՞վ են օգտագործվում թարմ տեղեկությունները, հաղորդումները, տիեզերական տեխնոլոգիաները և երկրազնդի դիտարկումները:	1.40

What requires the most progress to reach the desired level of capacity? (5 Highest capacity gaps)

HFA	Description in English	Description in Armenian	Capacity gap
4.j.	To what extent diversification of income options of population in high-risk areas are promoted and their income and assets are protected.	Բարձր ռիսկային տարածքներում որքանո՞վ են խթանվում բնակչության եկամտի աղբյուրների բազմազանեցումը և ակտիվների պահպանումը:	2.65
3.f.	How well do institutes dealing with urban development provide information on disaster reduction options?	Քաղաքաշինության հաստատություն-ները որքանո՞վ են տրամադրում աղետների ռիսկերի նվազեցման տարբերակների մասին տեղեկություններ:	2.46
1.j.	To what extent are there strategies in place for the management of volunteers to participate in DRR	Որքանո՞վ գոյություն ունեն այնպիսի ռազմավարություններ, որոնք վերաբերում են աղետների ռիսկի նվազեցման ոլորտում կամավորների մասնակցության կառավարմանը:	2.40
3.m.	To what extent is there equal access and opportunities for DRR training and education for women and vulnerable constituencies?	Աղետների ռիսկերի նվազեցման ուսուցման և կրթության ոլոտում որքանո՞վ են հավասար հնարավորություններ ապահովվում կանանց և խոցելի խմբերի համար:	2.38
4.l.	To what extent public-private partnership encourages engagement of private sector in disaster risk reduction activities.	Որքանով են հանրային-մասնավոր գործընկերություն-ները խրախուսում աղետների ռիսկերի նվազեցման գործողություն-ներում մասնավոր հատվածի ներգրավումը:	2.29

What are considered to be the 3 most important capacities?

HFA	Description in English	Description in Armenian	Average importance
1.a.	To what extent is there an legislative and regulatory framework in place for the DRR system	Որքանո՞վ է կայացած աղետների ռիսկի նվազեցման ոլորտի օրենսդրական և կանոնակարգիչ դաշտը:	2.93
3.i.	To what extent are local risk reduction and disaster preparedness programs promoted and implemented in schools and higher education?	Տեղական ռիսկերի նվազեցման և աղետների պատրաստվածության ծրագրերը որքանո՞վ են քաջալերվում և իրականացվում դպրոցներում և բարձրագույն ուսումնական հաստատություններում:	2.92
5.b.	To what extent are there technical and organizational capacities to manage disasters at regional (Caucasus), national and local levels?	Որքանո՞վ են առկա տեխնիկական և կազմակերպչական կարողություններ՝ աղետները տարածաշրջանի (Կովկասի), ազգային և տեղական մակարդակներով կառավարելու համար:	2.91

What are considered to be the 3 least important capacities?

HFA	Description in English	Description in Armenian	Average importance
1.j.	To what extent are there strategies in place for the management of volunteers to participate in DRR	Որքանո՞վ գոյություն ունեն այնպիսի ռազմավարություններ, որոնք վերաբերում են աղետների ռիսկի նվազեցման ոլորտում կամավորների մասնակցության կառավարմանը:	1.90
3.b.	To what extent are disaster expert networks across sectors and between regions available when agencies and other actors develop local risk reduction plans?	Ռիսկերի նվազեցման տեղական պլաններ կազմելու ժամանակ որքանո՞վ գոյություն ունեն աղետների գծով մասնագետների միջճյուղային և տարածաշրջանային ցանցեր:	2.11
2.m.	To what extent is statistical information and data on regional disaster risks impacts and loses compiled and standardized in the DRR system?	Որքանով ենտարածաշրջանային աղետների ռիսկերի հետրանքների և կորուստների վերաբերյալ վիճակագրական տեղեկությունները և տվյալները հավաքված և ստանդարտացված աղետների ռիսկերի նվաեցման համակարգում:	2.18
2.o.	To what extent are there capacities to conduct research, analyze and report on long term changes and emerging issues that might increase vulnerabilities and risks or the capacity of authorities and communities to respond to disasters in the DRR system?	Որքանո՞վ են առկա կարողություններ իրականացնել հետազոտություններ, վերլուծել և հաշվետվություններ կազմել երկարաժամկետ փոփոխությունների և ծագող հարցերի վերաբերյալ, որոնք կարող են ավելացնել խոցելիությունը և ռիսկերը կամ իշխանությունների և համայքների կարողությունը արձագանքել աղետներին աղետների ռիսկերի նվազեցման համակարգի շրջանակներում:	2.18

What are possible priorities? (10 highest values of (capacity gap x importance))

HFA	Description in English	Description in Armenian	Capacity gap x importance
4.j.	To what extent diversification of income options of population in high-risk areas are promoted and their income and assets are protected.	Բարձր ռիսկային տարածքներում որքանո՞վ են խթանվում բնակչության եկամտի աղբյուրների բազմազանեցումը և ակտիվների պահպանումը:	6.81
3.j.	To what extent are programs and activities for learning how to minimize the effect of hazards promoted and implemented in schools?	Որքանո՞վ են դպրոցներում խրախուսվում այն ծրագրերը և գործունեություն-ները, որոնք սովորեցնում են ինչպես նվազեցնել վտանգների ազդեցությունը:	6.35
4.k.	To what extent financial risk-sharing mechanisms are in place, particularly insurance and reinsurance against disasters.	Որքանո՞վ առկա ռիսկի բաշխման ֆինանսական մեխանիզմները, մասնավորապես, աղետներից ապահովագրությունը և վերաապահովագրությունը:	6.17
1.b.	To what extent is there an integrated institutional framework in place for engagement, consensus building and coordination for the DRR system	Աղետների ռիսկի նվազեցման համակագում որքանո՞վ է կայացած ինտեգրացված ինստիտուցիոնալ դաշտը՝ ներգրավման, համաձայնության ձևավորման և համակարգման համար:	5.65
4.l.	To what extent public-private partnership encourages engagement of private sector in disaster risk reduction activities.	Որքանով են հանրային-մասնավոր գործընկերություն-ները խրախուսում աղետների ռիսկերի նվազեցման գործողություն-ներում մասնավոր հատվածի ներգրավումը:	5.61
5.b.	To what extent are there technical and organizational capacities to manage disasters at regional (Caucasus), national and local levels?	Որքանո՞վ են առկա տեխնիկական և կազմակերպչական կարողություններ՝ աղետները տարածաշրջանի (Կովկասի), ազգային և տեղական մակարդակներով կառավարելու համար:	5.55
3.f.	How well do institutes dealing with urban development provide information on disaster reduction options?	Քաղաքաշինության հաստատություն-ները որքանո՞վ են տրամադրում աղետների ռիսկերի նվազեցման տարբերակների մասին տեղեկություններ:	5.54
3.m.	To what extent is there equal access and opportunities for DRR training and education for women and vulnerable constituencies?	Աղետների ռիսկերի նվազեցման ուսուցման և կրթության ոլոտում որքանո՞վ են հավասար հնարավորություններ ապահովվում կանանց և խոցելի խմբերի համար:	5.54
3.h.	How well is DRR knowledge included into relevant sections of the school curricula and formal and informal channels used to reach youth and children?	Որքանո՞վ է աղետների ռիսկերի նվազեցման մասին գիտելիքը ներառված դպրոցական ծրագրերի համապատասխան բաժիններում, ինչպես նաև երեխաների և պատանիների համար նախատեսված պաշտոնական և ոչ պաշտոնական հաղորդակցության միջոցներում:	5.46
1.c.	To what extent are DRR issues integrated into national policies, strategies and plans?	Որքանո՞վ են աղետների ռիսկի նվազեցմանը վերաբերող հարցերը ներառված ազգային քաղաքականության, ռազմավարության և պլանների մեջ:	5.35

Annex 7.

List of participants involved in the Capacity Assessment process

##	Agency	Title	Name
1.	National Security Council (NSC)	Secretary of NSC	Artur Baghdasaryan
	NSC	Head of department	Aram Tananyan
	NSC	Head of office chief adviser to the secretary of the NSC	Armen Bodoyan
	NSC	Aide to the secretary of the NSC	Eduard Melkonyan
2.	Ministry of Emergency Situations (MOES)	Minister of Emergency Situations	Mher Shahgeldyan
	MOES	Head of the foreign relation International cooperation department	Aslanyan Ara
	MOES	Press secretary	Susanna Abrahamyan
	MOES	Head of the International Aimed Program Division	Lilit Nazaryan
	MOES	Department of Disaster Prevention and Elimination of Consequences	Edik Karapetyan
	MOES	Department of Organizational mobilization	Armen Karapetyan
	MOES	Disasters Medical Treatment	Jemma Harutyunyan
3.	Ministry of Territorial Administration	Deputy Minister	Vache Terteryan
4.	Ministry of Environment	DRR specialist	Martiros Tsarukyan
5.	Ministry of Health	DRR specialist	Vladimir Darbinyan
6.	Armenian Rescue Service (ARS)	Head of ARS	Edik Barseghyan
	ARS	Rector of Crisis Management State Academy (CMSA)	Hamlet Matevosyan
	ARS	Head of Population and Territory Protection department	Hovhannes Yemishyan
	ARS	Deputy head of operational management department	Artavazd Davtyan
	ARS	Head of public affairs and information section	Nikolay Grigoryan
	ARS	Head of operational department	Tigran Gidachyan
	ARS	Head of department	Edan Sngryan
7.	Technical Safety Centre	Head of technical Safety Centre	Petrosyan Ashot
	Technical Safety Centre	Deputy Director	Aram Ohanyan
8.	National Service for Seismic Protection (NSSP)	Head of NSSP	Alvaro Antonyan
	NSSP	Deputy Head of NSSP	Hrachya Petrosyan

	NSSP	Head of Information analysis administrations	Mikayel Yenonov
	NSSP	Head of scientific and technical research department	Ashkhen Tovmasyan
	NSSP	Head of seismic hazard and risk assessment department	Rafael Baghdasaryan
	NSSP	Head of network department	Valeri Arzumanyan
	NSSP	Head of public relations and international cooperation department	Hamlet Bisharyan
	NSSP	Head of buildings and structure seismic resistance department	Gurgen Namalyan
9.	National Reserves Agency	Deputy Head of National reserves Agency	Khachatryan Areg
	National Reserves Agency	Control Section	Hovsepyan Artur
	National Reserves Agency	Formation section	Petrosyan Anna
10.	Armstatehydromet	Head of Armstatehydromet	Levon Vardanyan
	Armstatehydromet	Deputy Head of Armstatehydromet	Melkonyan Hamlet
11.	Ararat Region	Deputy head of regional administration	Ashot Muradyan
		Head of ARS department	Vardan Hovsepyan
		Head of Territorial administration department	Ashot Vardanyan
		School director (Ranchpar community)	Sveta Dallakyan
		Teacher of elementary school (Ranchpar community)	Lusine Petrosyan
		Teacher of military studies (Ranchpar community)	Stepan Dallakyan
12.	Aragatsotn Region	Deputy head of regional administration	Meloyan Andranik
		Head of Territorial administration department	Hovsepyan Siraznik
		Deputy head of ARS department	Hakobyan Artur
		School director (Parpi community)	Arshakyan Norik
		Deputy community leader (Parpi community)	Mkrtchyan Artur

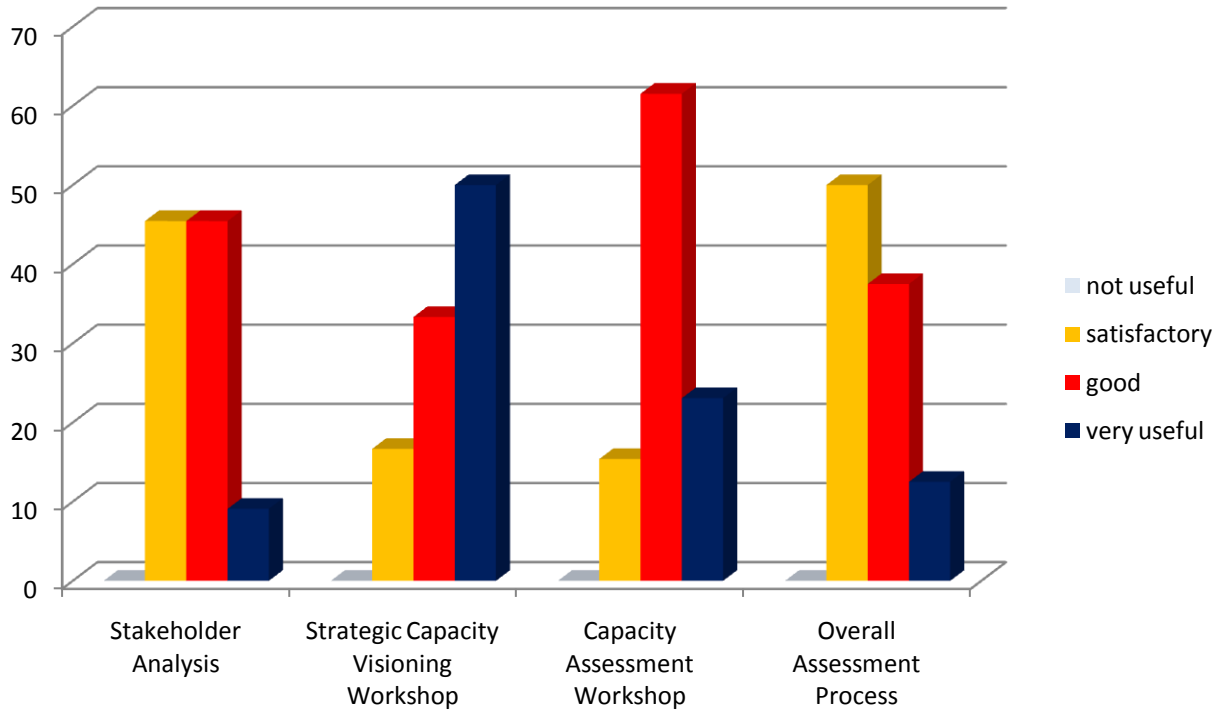
Annex 8

DRR Armenia Capacity Assessment (Joint activity of Ministry of Emergency Situations of Republic of Armenia and UNDP)

Process evaluation checklist

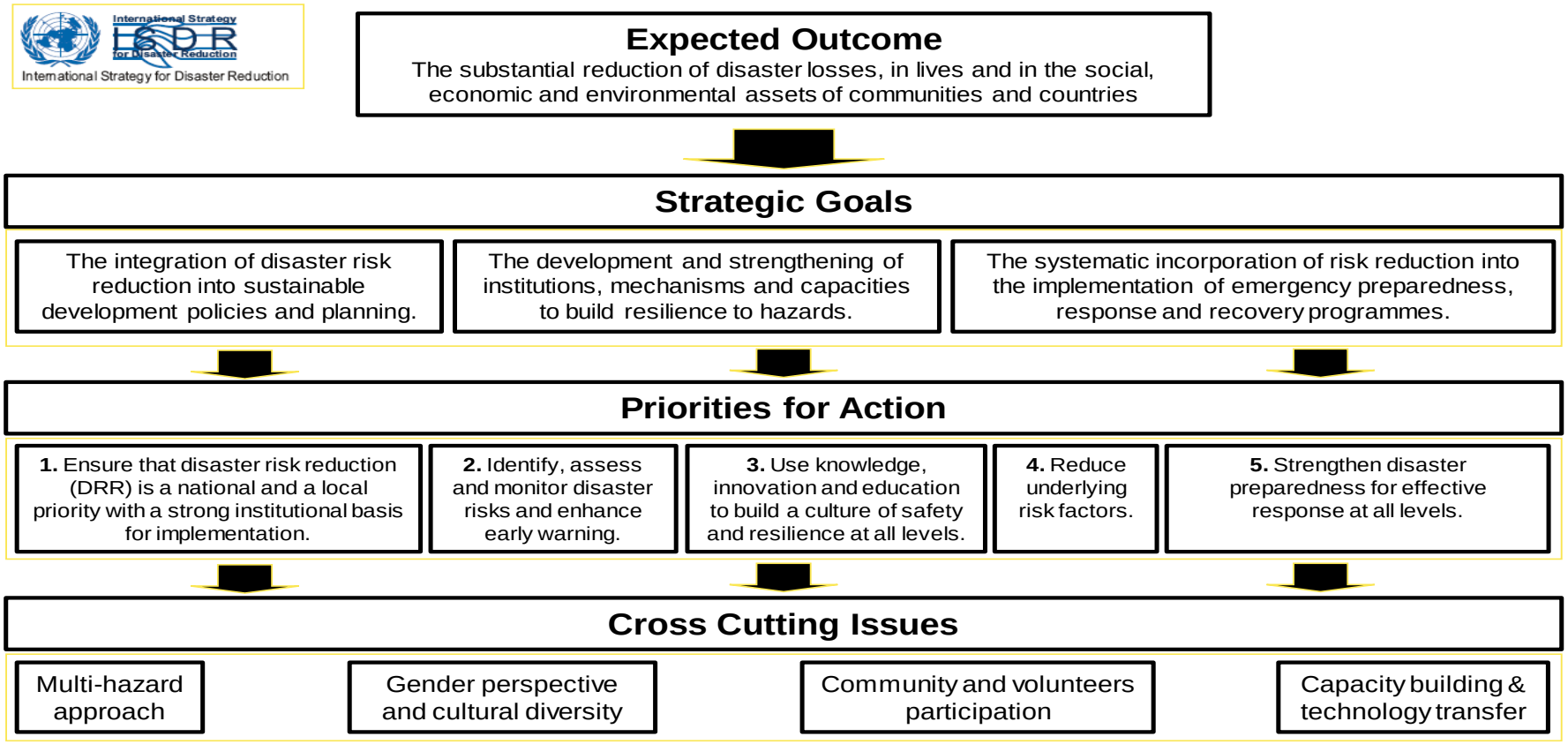
	Assessment Process	Did you participate?		Your opinion on the exercise				Notes/comments
		yes	*no*	*not useful*	*satisfactory*	*good*	*Very useful*	
1	Stakeholder Analysis (December 2009)							
2	Strategic Capacity Visioning Workshop (January 26, 2010)							
3	Capacity Assessment Workshop (February 01, 2010)							
4	Overall Assessment Process							
	Overall comments							

Distribution of participant responses (% of total number of responses provided)



Annex 9

Hyogo Framework for Action



Annex 10

DRR Capacity Assessment Process in Armenia

Summary of the Process and Milestones

DRR capacity assessment in Armenia was initiated by UNDP upon request from the Government of Armenia. UNDP Assessment team included specialists from BCPR and CDG groups as well as from UNDP Armenia. The Assessment process, including analysis of findings and reporting was done during December 01, 2009 through February 28, 2010. Below are the important milestones of the process.

1. Preparation for the first mission trip – November 20-30, 2009
2. First (kick-off) mission – November 30 – December 05, 2009
   - Mission formation
   - Kick-off meeting with the Ministry of Emergency Situations
   - Stakeholder meetings, presentation of the capacity development process
   - Follow-up meeting with DRR agencies
   - Debriefing with MoES, agreement on priorities and scope of the process
3. Stakeholder meetings – December 08 – January 15 (incl. New Year and Christmas holidays)
   - Follow-up stakeholder meetings
   - Stakeholder analysis workshop
   - Individual stakeholder analysis with five agencies
   - Presentation of the stakeholder analysis to the MoES
4. Preparation of the second mission trip – January 15-22, 2010
5. Second Mission – January 25 – February 06, 2010
   - Strategic Capacity Visioning Workshop
   - Meeting with the Secretary of National Security Council
   - Development of the Assessment Tool (based on HFA), consultations with stakeholders
   - Capacity Assessment Workshop
   - Presentation of initial findings and recommendations to the Working Group
   - Presentation of the findings and recommendations to the DRR Stakeholders
   - Initial presentation at Disaster Management Team (DMT)
6. Analysis and Reporting – February 08 – 26, 2010
   - Feedback meetings with stakeholders
   - Drafting report, revisions
7. Follow up meetings, report presentation and dissemination – March 2010